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Goddard, Audrey
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Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

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 tagctactat atgtcaagtg ctgtgcaagg tattacactc tgtaattgaa 2050
 tattattcct caaaaaattg cacatagtag aacgctatct gggaagctat 2100
 ttttttcagt ttgatattt ctagcttctc tacttccaaa ctaattttta 2150
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 aaccttaatt tattattaac atacctaaga agtacattgt tacctctata 2250
 taccaaagca catttttaaaa gtgccattaa caaatgtatc actagccctc 2300
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 aattaaagca tttagaaaac tt 2372

<210> 6
 <211> 322
 <212> PRT
 <213> Homo Sapien

<400> 6
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 Thr Thr Arg Leu Leu Val Gln Gly Ser Leu Arg Ala Glu Glu Leu
 20 25 30
 Ser Ile Gln Val Ser Cys Arg Ile Met Gly Ile Thr Leu Val Ser
 35 40 45
 Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala
 50 55 60
 Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu
 65 70 75
 Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val
 80 85 90
 Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys
 95 100 105
 Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val
 110 115 120
 Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp
 125 130 135

Thr	Asn	Ser	Cys	Ile	Pro	Glu	Ile	Ile	Thr	Thr	Lys	Asp	Pro	Ile	
				140					145					150	
Phe	Asn	Thr	Gln	Thr	Ala	Thr	Gln	Thr	Thr	Glu	Phe	Ile	Val	Ser	
				155					160					165	
Asp	Ser	Thr	Tyr	Ser	Val	Ala	Ser	Pro	Tyr	Ser	Thr	Ile	Pro	Ala	
				170					175					180	
Pro	Thr	Thr	Thr	Pro	Pro	Ala	Pro	Ala	Ser	Thr	Ser	Ile	Pro	Arg	
				185					190					195	
Arg	Lys	Lys	Leu	Ile	Cys	Val	Thr	Glu	Val	Phe	Met	Glu	Thr	Ser	
				200					205					210	
Thr	Met	Ser	Thr	Glu	Thr	Glu	Pro	Phe	Val	Glu	Asn	Lys	Ala	Ala	
				215					220					225	
Phe	Lys	Asn	Glu	Ala	Ala	Gly	Phe	Gly	Gly	Val	Pro	Thr	Ala	Leu	
				230					235					240	
Leu	Val	Leu	Ala	Leu	Leu	Phe	Phe	Gly	Ala	Ala	Ala	Gly	Leu	Gly	
				245					250					255	
Phe	Cys	Tyr	Val	Lys	Arg	Tyr	Val	Lys	Ala	Phe	Pro	Phe	Thr	Asn	
				260					265					270	
Lys	Asn	Gln	Gln	Lys	Glu	Met	Ile	Glu	Thr	Lys	Val	Val	Lys	Glu	
				275					280					285	
Glu	Lys	Ala	Asn	Asp	Ser	Asn	Pro	Asn	Glu	Glu	Ser	Lys	Lys	Thr	
				290					295					300	
Asp	Lys	Asn	Pro	Glu	Glu	Ser	Lys	Ser	Pro	Ser	Lys	Thr	Thr	Val	
				305					310					315	
Arg	Cys	Leu	Glu	Ala	Glu	Val									
				320											

<210> 7
 <211> 2586
 <212> DNA
 <213> Homo Sapien

<400> 7
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 ccgcagcgca actcggtcca gtcggggcgg cggctgcggg cgcagagcgg 150
 agatgcagcg gcttggggcc accctgctgt gcctgctgct ggcggcgggc 200
 gtccccacgg cccccgcgcc cgctccgacg gcgacctcgg ctccagtcaa 250
 gcccgggccc gctctcagct accgcagga ggaggccacc ctcaatgaga 300

tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350
 agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400
 agaagtgaac ctggcaaact tacctcccag ctatcacaat gagaccaaca 450
 cagacacgaa ggttggaat aataccatcc atgtgcaccg agaaattcac 500
 aagataacca acaaccagac tggacaaatg gtcttttcag agacagttat 550
 cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcacatcgc 600
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 gtgctgtgga gaccagctgt gtgtctgggg tcaactgcacc aaaatggcca 750
 ccaggggcag caatgggacc atctgtgaca accagaggga ctgccagccg 800
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 tgtgccagtg gcctcctctg ccagccccac agccacagcc tgggtgtatgt 1000
 gtgcaagccg accttcgtgg ggagccgtga ccaagatggg gagatcctgc 1050
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 gtgcgccagg agctggagga cctggagagg agcctgactg aagagatggc 1150
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 cttgggagag tcaggcaggg ttaaactgca ggagcagttt gccaccctg 1450
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gctcctacct ctgtgccagg gcagcatttt catatccaag atcaattccc 1800
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 gatctcagag gctcagagac tgcaagctgc ttgcccaagt cacacagcta 1900
 gtgaagacca gagcagtttc atctgggtgt gactctaagc tcagtgtctt 1950
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 tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450
 tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500
 tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550
 cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 8
 <211> 350
 <212> PRT
 <213> Homo Sapien

<400> 8
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 20 25 30
 Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala
 35 40 45
 Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp
 50 55 60
 Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu
 65 70 75
 Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu

	80		85		90
Pro Pro Ser Tyr	His Asn Glu Thr Asn	Thr Asp Thr Lys Val	Gly		
	95	100	105		
Asn Asn Thr Ile	His Val His Arg Glu	Ile His Lys Ile Thr	Asn		
	110	115	120		
Asn Gln Thr Gly	Gln Met Val Phe Ser	Glu Thr Val Ile Thr	Ser		
	125	130	135		
Val Gly Asp Glu	Glu Gly Arg Arg Ser	His Glu Cys Ile Ile	Asp		
	140	145	150		
Glu Asp Cys Gly	Pro Ser Met Tyr Cys	Gln Phe Ala Ser Phe	Gln		
	155	160	165		
Tyr Thr Cys Gln	Pro Cys Arg Gly Gln	Arg Met Leu Cys Thr	Arg		
	170	175	180		
Asp Ser Glu Cys	Cys Gly Asp Gln Leu	Cys Val Trp Gly His	Cys		
	185	190	195		
Thr Lys Met Ala	Thr Arg Gly Ser Asn	Gly Thr Ile Cys Asp	Asn		
	200	205	210		
Gln Arg Asp Cys	Gln Pro Gly Leu Cys	Cys Ala Phe Gln Arg	Gly		
	215	220	225		
Leu Leu Phe Pro	Val Cys Thr Pro Leu	Pro Val Glu Gly Glu	Leu		
	230	235	240		
Cys His Asp Pro	Ala Ser Arg Leu Leu	Asp Leu Ile Thr Trp	Glu		
	245	250	255		
Leu Glu Pro Asp	Gly Ala Leu Asp Arg	Cys Pro Cys Ala Ser	Gly		
	260	265	270		
Leu Leu Cys Gln	Pro His Ser His Ser	Leu Val Tyr Val Cys	Lys		
	275	280	285		
Pro Thr Phe Val	Gly Ser Arg Asp Gln	Asp Gly Glu Ile Leu	Leu		
	290	295	300		
Pro Arg Glu Val	Pro Asp Glu Tyr Glu	Val Gly Ser Phe Met	Glu		
	305	310	315		
Glu Val Arg Gln	Glu Leu Glu Asp Leu	Glu Arg Ser Leu Thr	Glu		
	320	325	330		
Glu Met Ala Leu	Gly Glu Pro Ala Ala	Ala Ala Ala Ala Leu	Leu		
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Gly Gly Glu Glu	Ile				
	350				

<210> 9

<211> 1395
<212> DNA
<213> Homo Sapien

<400> 9
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ttcaatctgc aaatctatgg ggtcctgggg ctcttctgga cccttaactg 200
ggtactggcc ctgggccaat gcgtcctcgc tggagccttt gcctccttct 250
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accacaagct cagaggagtg cagaaccctg tagcccgtg catcatgtgc 450
tgtttcaagt gctgcctctg gtgtctggaa aaatttatca agttcctaaa 500
ccgcaatgca tacatcatga tcgccatcta cggaagaat ttctgtgtct 550
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ttagccgaga gtggtggtcat gcacctgtca tcccagctac tcgggaggct 1250
gaggcaggag aatcgcttga acccgggagg cagaggttgc agtgagccga 1300

gatcgcgcca ctgcactcca acctgggtga cagactctgt ctccaaaaca 1350

aaacaaacaa acaaaaagat tttattaaag atattttgtt aactc 1395

<210> 10

<211> 321

<212> PRT

<213> Homo Sapien

<400> 10

Arg Thr Arg Gly Arg Thr Arg Gly Gly Cys Glu Lys Val Pro Ile
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Asn Thr Ser Cys Asn Pro Thr Ala His Leu Val Asn Ser Ser Cys
20 25 30

Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu
35 40 45

Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
50 55 60

Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
65 70 75

Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro
80 85 90

Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr
95 100 105

Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu
110 115 120

Thr Leu Val Gln Ile Ala Arg Val Ile Leu Glu Tyr Ile Asp His
125 130 135

Lys Leu Arg Gly Val Gln Asn Pro Val Ala Arg Cys Ile Met Cys
140 145 150

Cys Phe Lys Cys Cys Leu Trp Cys Leu Glu Lys Phe Ile Lys Phe
155 160 165

Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Lys Asn
170 175 180

phe Cys Val Ser Ala Lys Asn Ala Phe Met Leu Leu Met Arg Asn
185 190 195

Ile Val Arg Val Val Val Leu Asp Lys Val Thr Asp Leu Leu Leu
200 205 210

phe Phe Gly Lys Leu Leu Val Val Gly Gly Val Gly Val Leu Ser
215 220 225

phe Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu Gly Lys Asp Phe
230 235 240

Lys	Ser	Pro	His	Leu	Asn	Tyr	Tyr	Trp	Leu	Pro	Ile	Met	Thr	Ser	
				245					250					255	
Ile	Leu	Gly	Ala	Tyr	Val	Ile	Ala	Ser	Gly	Phe	Phe	Ser	Val	Phe	
				260					265					270	
Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe	Leu	Glu	Asp	Leu	
				275					280					285	
Glu	Arg	Asn	Asn	Gly	Ser	Leu	Asp	Arg	Pro	Tyr	Tyr	Met	Ser	Lys	
				290					295					300	
Ser	Leu	Leu	Lys	Ile	Leu	Gly	Lys	Lys	Asn	Glu	Ala	Pro	Pro	Asp	
				305					310					315	
Asn	Lys	Lys	Arg	Lys	Lys										
				320											

<210> 11
 <211> 1901
 <212> DNA
 <213> Homo Sapien

<400> 11
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 ctctgcccc tgcatacctgt gcagctgctg ccccgccagc cgcaactcca 150
 ccgtgagccg cctcatcttc acgttcttcc tcttctctggg ggtgctggtg 200
 tccatcatta tgctgagccc gggcgtggag agtcagctct acaagctgcc 250
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cagaccgagg agtgcccacc tatgctagac gccacacagc agcagcagca 1150
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a 1901

<210> 12

<211> 457

<212> PRT

<213> Homo Sapien

<400> 12

Met	Gly	Ala	Cys	Leu	Gly	Ala	Cys	Ser	Leu	Leu	Ser	Cys	Ala	Ser
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Cys	Leu	Cys	Gly	Ser	Ala	Pro	Cys	Ile	Leu	Cys	Ser	Cys	Cys	Pro
			20					25					30	

Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe

35					40					45				
Leu	Phe	Leu	Gly	Val	Leu	Val	Ser	Ile	Ile	Met	Leu	Ser	Pro	Gly
				50					55					60
Val	Glu	Ser	Gln	Leu	Tyr	Lys	Leu	Pro	Trp	Val	Cys	Glu	Glu	Gly
				65					70					75
Ala	Gly	Ile	Pro	Thr	Val	Leu	Gln	Gly	His	Ile	Asp	Cys	Gly	Ser
				80					85					90
Leu	Leu	Gly	Tyr	Arg	Ala	Val	Tyr	Arg	Met	Cys	Phe	Ala	Thr	Ala
				95					100					105
Ala	Phe	Phe	Phe	Phe	Phe	Phe	Thr	Leu	Leu	Met	Leu	Cys	Val	Ser
				110					115					120
Ser	Ser	Arg	Asp	Pro	Arg	Ala	Ala	Ile	Gln	Asn	Gly	Phe	Trp	Phe
				125					130					135
Phe	Lys	Phe	Leu	Ile	Leu	Val	Gly	Leu	Thr	Val	Gly	Ala	Phe	Tyr
				140					145					150
Ile	Pro	Asp	Gly	Ser	Phe	Thr	Asn	Ile	Trp	Phe	Tyr	Phe	Gly	Val
				155					160					165
Val	Gly	Ser	Phe	Leu	Phe	Ile	Leu	Ile	Gln	Leu	Val	Leu	Leu	Ile
				170					175					180
Asp	Phe	Ala	His	Ser	Trp	Asn	Gln	Arg	Trp	Leu	Gly	Lys	Ala	Glu
				185					190					195
Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr
				200					205					210
Leu	Leu	Phe	Tyr	Leu	Leu	Ser	Ile	Ala	Ala	Val	Ala	Leu	Met	Phe
				215					220					225
Met	Tyr	Tyr	Thr	Glu	Pro	Ser	Gly	Cys	His	Glu	Gly	Lys	Val	Phe
				230					235					240
Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala
				245					250					255
Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu
				260					265					270
Gln	Ala	Ser	Val	Ile	Thr	Leu	Tyr	Thr	Met	Phe	Val	Thr	Trp	Ser
				275					280					285
Ala	Leu	Ser	Ser	Ile	Pro	Glu	Gln	Lys	Cys	Asn	Pro	His	Leu	Pro
				290					295					300
Thr	Gln	Leu	Gly	Asn	Glu	Thr	Val	Val	Ala	Gly	Pro	Glu	Gly	Tyr
				305					310					315
Glu	Thr	Gln	Trp	Trp	Asp	Ala	Pro	Ser	Ile	Val	Gly	Leu	Ile	Ile

320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser	Leu Arg Ser Ser Asp His	
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr	Glu Glu Cys Pro Pro Met	
350	355	360
Leu Asp Ala Thr Gln Gln Gln Gln Gln	Gln Val Ala Ala Cys Glu	
365	370	375
Gly Arg Ala Phe Asp Asn Glu Gln Asp	Gly Val Thr Tyr Ser Tyr	
380	385	390
Ser Phe Phe His Phe Cys Leu Val Leu	Ala Ser Leu His Val Met	
395	400	405
Met Thr Leu Thr Asn Trp Tyr Lys Pro	Gly Glu Thr Arg Lys Met	
410	415	420
Ile Ser Thr Trp Thr Ala Val Trp Val	Lys Ile Cys Ala Ser Trp	
425	430	435
Ala Gly Leu Leu Leu Tyr Leu Trp Thr	Leu Val Ala Pro Leu Leu	
440	445	450
Leu Arg Asn Arg Asp Phe Ser		
455		

<210> 13
 <211> 1572
 <212> DNA
 <213> Homo Sapien

<400> 13
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 ctttagggat ggtgaggttg gaaaaagact cctgtaaccc tcttcagga 100
 tgaaccacct gccagaagac atggagaacg ctctcaccgg gagccagagc 150
 tcccatgctt ctctgcgcaa tatccattcc atcaaccca cacaactcat 200
 ggccaggatt gagtcctatg aaggaaggga aaagaaaggc atatctgatg 250
 tcaggaggac tttctgtttg tttgtcacct ttgacctctt attcgtaaca 300
 ttactgtgga taatagagtt aaatgtgaat ggaggcattg agaacacatt 350
 agagaaggag gtgatgcagt atgactacta ttcttcatat ttgatatat 400
 ttcttctggc agtttttcga tttaaagtgt taatacttgc atatgctgtg 450
 tgcagactgc gccattggtg ggcaatagcg ttgacaacgg cagtgaccag 500
 tgccttttta ctagcaaaag tgatccttcc gaagcttttc tctcaagggg 550

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 ggcaaaaaga ggcaggcagt ggagtctccc tgtcgacagt aaagttgaaa 900
 tggtgacgtc cactgctggc tttattgaac agctaataaa gatttattta 950
 ttgtaatacc tcacaaacgt tgtaccatat ccatgcacat ttagttgcct 1000
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 tgagcctgat gtgttaacaa ataggtgaag aaagtcttgt gctgtattcc 1100
 taatcaaaag acttaatata ttgaagtaac acttttttag taagcaagat 1150
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 gtaaaatgtc accagacatt tgtattattt ttatcatgaa atcatgtttt 1450
 tctctgattg ttctgaaatg ttctaaatac tcttattttg aatgcacaaa 1500
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<210> 14
 <211> 234
 <212> PRT
 <213> Homo Sapien

<400> 14
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 Gln Ser Ser His Ala Ser Leu Arg Asn Ile His Ser Ile Asn Pro
 20 25 30
 Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys
 35 40 45
 Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr

	50	55	60
Phe Asp Leu Leu Phe Val Thr Leu Leu Trp Ile Ile Glu Leu Asn	65	70	75
Val Asn Gly Gly Ile Glu Asn Thr Leu Glu Lys Glu Val Met Gln	80	85	90
Tyr Asp Tyr Tyr Ser Ser Tyr Phe Asp Ile Phe Leu Leu Ala Val	95	100	105
Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu	110	115	120
Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala	125	130	135
Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly	140	145	150
Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp	155	160	165
Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala	170	175	180
Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg	185	190	195
Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser	200	205	210
Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln	215	220	225
Asp Ser Glu Lys Pro Leu Leu Glu Leu	230		

<210> 15
 <211> °2768
 <212> DNA
 <213> Homo Sapien

<400> 15
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 ccgcctcccg ggacagaaga tgtgctccag ggtccctctg ctgctgccgc 150
 tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200
 tgccagtgc gccagccaca gacagtcttc tgcaactgcc gccaggggac 250
 cacggtgccc cgagacgtgc caccgacac ggtggggctg tacgtctttg 300
 agaacggcat caccatgctc gacgcaggca gctttgccgg cctgccgggc 350

ctgcagctcc tggacctgtc acagaaccag atcgccagcc tgcccagcgg 400
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cgcctctacc tgggcaagaa ccgcatccgc cacatccagc ctggtgcctt 550
cgacacgctc gaccgcctcc tggagctcaa gctgcaggac aacgagctgc 600
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 cagaaccgag tgcctatgag gacagtgtcc gccctgccct ccgcaacgtg 2400
 cagtccctgg gcacggcggg ccctgccatg tgctggtaac gcatgcctgg 2450
 gtccctgctgg gctctccac tccaggcgga ccctgggggc cagtgaagga 2500
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 tttcccattht attctgggaa gatgtttttc aaactcagag acaaggactt 2700
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<210> 16
 <211> 673
 <212> PRT
 <213> Homo Sapien

<400> 16
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 20 25 30
 Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
 35 40 45

Val	Pro	Arg	Asp	Val	Pro	Pro	Asp	Thr	Val	Gly	Leu	Tyr	Val	Phe	50	55	60
Glu	Asn	Gly	Ile	Thr	Met	Leu	Asp	Ala	Gly	Ser	Phe	Ala	Gly	Leu	65	70	75
Pro	Gly	Leu	Gln	Leu	Leu	Asp	Leu	Ser	Gln	Asn	Gln	Ile	Ala	Ser	80	85	90
Leu	Pro	Ser	Gly	Val	Phe	Gln	Pro	Leu	Ala	Asn	Leu	Ser	Asn	Leu	95	100	105
Asp	Leu	Thr	Ala	Asn	Arg	Leu	His	Glu	Ile	Thr	Asn	Glu	Thr	Phe	110	115	120
Arg	Gly	Leu	Arg	Arg	Leu	Glu	Arg	Leu	Tyr	Leu	Gly	Lys	Asn	Arg	125	130	135
Ile	Arg	His	Ile	Gln	Pro	Gly	Ala	Phe	Asp	Thr	Leu	Asp	Arg	Leu	140	145	150
Leu	Glu	Leu	Lys	Leu	Gln	Asp	Asn	Glu	Leu	Arg	Ala	Leu	Pro	Pro	155	160	165
Leu	Arg	Leu	Pro	Arg	Leu	Leu	Leu	Leu	Asp	Leu	Ser	His	Asn	Ser	170	175	180
Leu	Leu	Ala	Leu	Glu	Pro	Gly	Ile	Leu	Asp	Thr	Ala	Asn	Val	Glu	185	190	195
Ala	Leu	Arg	Leu	Ala	Gly	Leu	Gly	Leu	Gln	Gln	Leu	Asp	Glu	Gly	200	205	210
Leu	Phe	Ser	Arg	Leu	Arg	Asn	Leu	His	Asp	Leu	Asp	Val	Ser	Asp	215	220	225
Asn	Gln	Leu	Glu	Arg	Val	Pro	Pro	Val	Ile	Arg	Gly	Leu	Arg	Gly	230	235	240
Leu	Thr	Arg	Leu	Arg	Leu	Ala	Gly	Asn	Thr	Arg	Ile	Ala	Gln	Leu	245	250	255
Arg	Pro	Glu	Asp	Leu	Ala	Gly	Leu	Ala	Ala	Leu	Gln	Glu	Leu	Asp	260	265	270
Val	Ser	Asn	Leu	Ser	Leu	Gln	Ala	Leu	Pro	Gly	Asp	Leu	Ser	Gly	275	280	285
Leu	Phe	Pro	Arg	Leu	Arg	Leu	Leu	Ala	Ala	Ala	Arg	Asn	Pro	Phe	290	295	300
Asn	Cys	Val	Cys	Pro	Leu	Ser	Trp	Phe	Gly	Pro	Trp	Val	Arg	Glu	305	310	315
Ser	His	Val	Thr	Leu	Ala	Ser	Pro	Glu	Glu	Thr	Arg	Cys	His	Phe	320	325	330

Pro	Pro	Lys	Asn	Ala	Gly	Arg	Leu	Leu	Leu	Glu	Leu	Asp	Tyr	Ala	
				335					340					345	
Asp	Phe	Gly	Cys	Pro	Ala	Thr	Thr	Thr	Thr	Ala	Thr	Val	Pro	Thr	
				350					355					360	
Thr	Arg	Pro	Val	Val	Arg	Glu	Pro	Thr	Ala	Leu	Ser	Ser	Ser	Leu	
				365					370					375	
Ala	Pro	Thr	Trp	Leu	Ser	Pro	Thr	Ala	Pro	Ala	Thr	Glu	Ala	Pro	
				380					385					390	
Ser	Pro	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Val	Gly	Pro	Val	Pro	Gln	
				395					400					405	
Pro	Gln	Asp	Cys	Pro	Pro	Ser	Thr	Cys	Leu	Asn	Gly	Gly	Thr	Cys	
				410					415					420	
His	Leu	Gly	Thr	Arg	His	His	Leu	Ala	Cys	Leu	Cys	Pro	Glu	Gly	
				425					430					435	
Phe	Thr	Gly	Leu	Tyr	Cys	Glu	Ser	Gln	Met	Gly	Gln	Gly	Thr	Arg	
				440					445					450	
Pro	Ser	Pro	Thr	Pro	Val	Thr	Pro	Arg	Pro	Pro	Arg	Ser	Leu	Thr	
				455					460					465	
Leu	Gly	Ile	Glu	Pro	Val	Ser	Pro	Thr	Ser	Leu	Arg	Val	Gly	Leu	
				470					475					480	
Gln	Arg	Tyr	Leu	Gln	Gly	Ser	Ser	Val	Gln	Leu	Arg	Ser	Leu	Arg	
				485					490					495	
Leu	Thr	Tyr	Arg	Asn	Leu	Ser	Gly	Pro	Asp	Lys	Arg	Leu	Val	Thr	
				500					505					510	
Leu	Arg	Leu	Pro	Ala	Ser	Leu	Ala	Glu	Tyr	Thr	Val	Thr	Gln	Leu	
				515					520					525	
Arg	Pro	Asn	Ala	Thr	Tyr	Ser	Val	Cys	Val	Met	Pro	Leu	Gly	Pro	
				530					535					540	
Gly	Arg	Val	Pro	Glu	Gly	Glu	Glu	Ala	Cys	Gly	Glu	Ala	His	Thr	
				545					550					555	
Pro	Pro	Ala	Val	His	Ser	Asn	His	Ala	Pro	Val	Thr	Gln	Ala	Arg	
				560					565					570	
Glu	Gly	Asn	Leu	Pro	Leu	Leu	Ile	Ala	Pro	Ala	Leu	Ala	Ala	Val	
				575					580					585	
Leu	Leu	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ala	Ala	Tyr	Cys	Val	Arg	
				590					595					600	
Arg	Gly	Arg	Ala	Met	Ala	Ala	Ala	Ala	Gln	Asp	Lys	Gly	Gln	Val	
				605					610					615	

Gly	Pro	Gly	Ala	Gly	Pro	Leu	Glu	Leu	Glu	Gly	Val	Lys	Val	Pro
				620					625					630
Leu	Glu	Pro	Gly	Pro	Lys	Ala	Thr	Glu	Gly	Gly	Gly	Glu	Ala	Leu
				635					640					645
Pro	Ser	Gly	Ser	Glu	Cys	Glu	Val	Pro	Leu	Met	Gly	Phe	Pro	Gly
				650					655					660
Pro	Gly	Leu	Gln	Ser	Pro	Leu	His	Ala	Lys	Pro	Tyr	Ile		
				665					670					

<210> 17
 <211> 1672
 <212> DNA
 <213> Homo Sapien

<400> 17
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 tgctgctgag cttggcctcg gcgtcctcgg atgaagaagg cagccaggat 150
 gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200
 ccatactact gcaggcagag tagttgctgg tcaaataatt cttgattcag 250
 aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300
 agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350
 aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaaccag 400
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 agatggcaga ctgtggtgtg ctacaaccta tgactacaaa gcagatgaaa 550
 agtggggctt ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600
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 cagaatgact ccagagagct ctactttctg ttttttactt ttcattgattg 1450
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18
 <211> 301
 <212> PRT
 <213> Homo Sapien

<400> 18
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 Glu Ser Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val
 35 40 45
 Lys Asp His Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe
 50 55 60
 Leu Asp Ser Glu Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu
 65 70 75
 Glu Asp Ser Leu Lys Ser Gln Glu Gly Glu Ser Val Thr Glu Asp
 80 85 90
 Ile Ser Phe Leu Glu Ser Pro Asn Pro Glu Asn Lys Asp Tyr Glu
 95 100 105
 Glu Pro Lys Lys Val Arg Lys Pro Ala Leu Thr Ala Ile Glu Gly
 110 115 120

Thr	Ala	His	Gly	Glu	Pro	Cys	His	Phe	Pro	Phe	Leu	Phe	Leu	Asp	125	130	135
Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg	140	145	150
Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp	155	160	165
Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met	170	175	180
Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn	185	190	195
Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	Tyr	Leu	200	205	210
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val	215	220	225
Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln	230	235	240
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	245	250	255
Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	260	265	270
Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	275	280	285
Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg	290	295	300

Leu

<210> 19
 <211> 1508
 <212> DNA
 <213> Homo Sapien

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 tacattttta tcaactggatg tgactcgggc tttggaaact tggcagccag 250
 aacttttgat aaaaagggat ttcatgtaat cgctgcctgt ctgactgaat 300

caggatcaac agctttaag gcagaaacct cagagagact tcgtactgtg 350
cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
gaagaaccaa gttggggaga aaggctctctg gggctctgatc aataatgctg 450
gtgttcccgg cgtgctggct cccactgact ggctgacact agaggactac 500
agagaacctt ttgaagtga cctgtttgga ctcatcagtg tgacactaaa 550
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cagatccagt aaaggtaatt gaaaaaaaaac tcgccatttg ggagcagctg 800
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aaaaaaaa 1508

<210> 20

<211> 319

<212> PRT

<213> Homo Sapien

<400> 20

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Tyr Ile Phe Ile Thr	Gly Cys Asp Ser Gly	Phe Gly Asn Leu Ala	
35		40	45
Ala Arg Thr Phe Asp	Lys Lys Gly Phe His	Val Ile Ala Ala Cys	
50		55	60
Leu Thr Glu Ser Gly	Ser Thr Ala Leu Lys	Ala Glu Thr Ser Glu	
65		70	75
Arg Leu Arg Thr Val	Leu Leu Asp Val Thr	Asp Pro Glu Asn Val	
80		85	90
Lys Arg Thr Ala Gln	Trp Val Lys Asn Gln	Val Gly Glu Lys Gly	
95		100	105
Leu Trp Gly Leu Ile	Asn Asn Ala Gly Val	Pro Gly Val Leu Ala	
110		115	120
Pro Thr Asp Trp Leu	Thr Leu Glu Asp Tyr	Arg Glu Pro Ile Glu	
125		130	135
Val Asn Leu Phe Gly	Leu Ile Ser Val Thr	Leu Asn Met Leu Pro	
140		145	150
Leu Val Lys Lys Ala	Gln Gly Arg Val Ile	Asn Val Ser Ser Val	
155		160	165
Gly Gly Arg Leu Ala	Ile Val Gly Gly Gly	Tyr Thr Pro Ser Lys	
170		175	180
Tyr Ala Val Glu Gly	Phe Asn Asp Ser Leu	Arg Arg Asp Met Lys	
185		190	195
Ala Phe Gly Val His	Val Ser Cys Ile Glu	Pro Gly Leu Phe Lys	
200		205	210
Thr Asn Leu Ala Asp	Pro Val Lys Val Ile	Glu Lys Lys Leu Ala	
215		220	225
Ile Trp Glu Gln Leu	Ser Pro Asp Ile Lys	Gln Gln Tyr Gly Glu	
230		235	240
Gly Tyr Ile Glu Lys	Ser Leu Asp Lys Leu	Lys Gly Asn Lys Ser	
245		250	255
Tyr Val Asn Met Asp	Leu Ser Pro Val Val	Glu Cys Met Asp His	
260		265	270
Ala Leu Thr Ser Leu	Phe Pro Lys Thr His	Tyr Ala Ala Gly Lys	
275		280	285
Asp Ala Lys Ile Phe	Trp Ile Pro Leu Ser	His Met Pro Ala Ala	

290	295	300
Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn		
305	310	315

Pro Lys Ala Val

<210> 21
 <211> 1849
 <212> DNA
 <213> Homo Sapien

<400> 21
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 acggaagggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
 tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
 agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
 gaagtaaatag agcaagcact gaagaaaata ttatcaaata tcaaaaagaa 300
 tgtggttaggt tggtaaaaat tccgtcgtca ttcagatcag atcatgacgt 350
 ttagagagag gctgcttcac aaaaacttgc aggagcattt ttcaaaccac 400
 gaccttggtt ttctgctatt aacaccaagt ataataacag aaagctgctc 450
 tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
 acaggggtacc tttagtgggt gccaatctgg gcatgtctga acaactgggt 550
 tataaaaactg tatcagggtc ctgtatgtcc actgggttta gccgagcagt 600
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 atatgcaaaa aagtggaaga cagtgaacaa gcagtagata aactagtaaa 750
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 actacaacca ccatctcgat gtagtagaca atctgacctt aatggtagaa 1000
 cacttgaca ttctgaagc tagtcagct agtacaccac aaatcattaa 1050
 gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcggc 1100

tgtagatatac acaagacaaa cgatctaaag caaataactgg tagtagtaac 1150
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 aaagatgaag ggTTTTggtg aatattcacg gtctcctaca ttttgatcct 1250
 tttAACctta caaggagatt tttttatttg gctgatgggt aaagccaaac 1300
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 tcccagcact tagggaagac aagtcaggag gattgattga agctaggagt 1600
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 aaatttgcaa aacatcatct aaaattttaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 22
 <211> 409
 <212> PRT
 <213> Homo Sapien

<400> 22
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 Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
 35 40 45
 Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
 50 55 60
 Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
 65 70 75
 Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
 80 85 90
 Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
 95 100 105

Ser Asp Gln Ile	Met Thr Phe Arg Glu	Arg Leu Leu His Lys Asn	
	110	115	120
Leu Gln Glu His	Phe Ser Asn Gln Asp	Leu Val Phe Leu Leu Leu	
	125	130	135
Thr Pro Ser Ile	Ile Thr Glu Ser Cys	Ser Thr His Arg Leu Glu	
	140	145	150
His Ser Leu Tyr	Lys Pro Gln Lys Gly	Leu Phe His Arg Val Pro	
	155	160	165
Leu Val Val Ala	Asn Leu Gly Met Ser	Glu Gln Leu Gly Tyr Lys	
	170	175	180
Thr Val Ser Gly	Ser Cys Met Ser Thr	Gly Phe Ser Arg Ala Val	
	185	190	195
Gln Thr His Ser	Ser Lys Phe Phe Glu	Glu Asp Gly Ser Leu Lys	
	200	205	210
Glu Val His Lys	Ile Asn Glu Met Tyr	Ala Ser Leu Gln Glu Glu	
	215	220	225
Leu Lys Ser Ile	Cys Lys Lys Val Glu	Asp Ser Glu Gln Ala Val	
	230	235	240
Asp Lys Leu Val	Lys Asp Val Asn Arg	Leu Lys Arg Glu Ile Glu	
	245	250	255
Lys Arg Arg Gly	Ala Gln Ile Gln Ala	Ala Arg Glu Lys Asn Ile	
	260	265	270
Gln Lys Asp Pro	Gln Glu Asn Ile Phe	Leu Cys Gln Ala Leu Arg	
	275	280	285
Thr Phe Phe Pro	Asn Ser Glu Phe Leu	His Ser Cys Val Met Ser	
	290	295	300
Leu Lys Asn Arg	His Val Ser Lys Ser	Ser Cys Asn Tyr Asn His	
	305	310	315
His Leu Asp Val	Val Asp Asn Leu Thr	Leu Met Val Glu His Thr	
	320	325	330
Asp Ile Pro Glu	Ala Ser Pro Ala Ser	Thr Pro Gln Ile Ile Lys	
	335	340	345
His Lys Ala Leu	Asp Leu Asp Asp Arg	Trp Gln Phe Lys Arg Ser	
	350	355	360
Arg Leu Leu Asp	Thr Gln Asp Lys Arg	Ser Lys Ala Asn Thr Gly	
	365	370	375
Ser Ser Asn Gln	Asp Lys Ala Ser Lys	Met Ser Ser Pro Glu Thr	
	380	385	390

Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg
 395 400 405

Ser Pro Thr Phe

<210> 23
 <211> 2651
 <212> DNA
 <213> Homo Sapien

<400> 23
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 cgccgcccac accctctgcg gtccccgcgg cgcttgccac ccttccctcc 150
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 ccgcgaaacc ccgaggtcac cagcccgccg ctctgcttcc ctgggcccgc 250
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 ctcgctagtc cccgactccg ccagccctcg gcccgctgcc gtagcgccgc 450
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 aatccctgaa tgatatgttt gtgaagacat atggccattt atacatgcaa 900
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 tcctggagcg gatgttccgc ctggtgaact ccagtagca ctttacagat 1050
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 agatgtccct cgcaaattga agctccaggt tactcgtgct tttgtagcag 1150

cccgtacttt cgctcaaggc ttagcggttg cgggagatgt cgtgagcaag 1200
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 gatctactgc tcccactgcc ggggtctcgt gactgtgaag ccatgttaca 1300
 actactgctc aaacatcatg agaggctgtt tggccaacca aggggatctc 1350
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 gctagagggg cctttcaaca ttgaatcggg catggatccc atcgatgtga 1450
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 aatttctcgt tccatctctg aaagtgcctt cagtgtcgc ttcagaccac 1600
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c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

Met	Ala	Arg	Phe	Gly	Leu	Pro	Ala	Leu	Leu	Cys	Thr	Leu	Ala	Val
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Leu	Ser	Ala	Ala	Leu	Leu	Ala	Ala	Glu	Leu	Lys	Ser	Lys	Ser	Cys
				20					25					30

Ser	Glu	Val	Arg	Arg	Leu	Tyr	Val	Ser	Lys	Gly	Phe	Asn	Lys	Asn
				35					40					45

Asp	Ala	Pro	Leu	His	Glu	Ile	Asn	Gly	Asp	His	Leu	Lys	Ile	Cys
				50					55					60

Pro	Gln	Gly	Ser	Thr	Cys	Cys	Ser	Gln	Glu	Met	Glu	Glu	Lys	Tyr
				65					70					75

Ser	Leu	Gln	Ser	Lys	Asp	Asp	Phe	Lys	Ser	Val	Val	Ser	Glu	Gln
				80					85					90

Cys	Asn	His	Leu	Gln	Ala	Val	Phe	Ala	Ser	Arg	Tyr	Lys	Lys	Phe
				95					100					105

Asp	Glu	Phe	Phe	Lys	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu
				110					115					120

Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn
				125					130					135

Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr
				140					145					150

Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp
				155					160					165

Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr
				170					175					180

His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu
				185					190					195

Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln
				200					205					210

Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu
				215					220					225

Ala Val Ala Gly Asp Val Val Ser Lys Val Ser Val Val Asn Pro

	230	235	240
Thr Ala Gln Cys	Thr His Ala Leu Leu	Lys Met Ile Tyr Cys	Ser
	245	250	255
His Cys Arg Gly	Leu Val Thr Val Lys	Pro Cys Tyr Asn Tyr	Cys
	260	265	270
Ser Asn Ile Met	Arg Gly Cys Leu Ala	Asn Gln Gly Asp Leu	Asp
	275	280	285
phe Glu Trp Asn	Asn Phe Ile Asp Ala	Met Leu Met Val Ala	Glu
	290	295	300
Arg Leu Glu Gly	Pro Phe Asn Ile Glu	Ser Val Met Asp Pro	Ile
	305	310	315
Asp Val Lys Ile	Ser Asp Ala Ile Met	Asn Met Gln Asp Asn	Ser
	320	325	330
Val Gln Val Ser	Gln Lys Val Phe Gln	Gly Cys Gly Pro Pro	Lys
	335	340	345
pro Leu Pro Ala	Gly Arg Ile Ser Arg	Ser Ile Ser Glu Ser	Ala
	350	355	360
phe Ser Ala Arg	Phe Arg Pro His His	Pro Glu Glu Arg Pro	Thr
	365	370	375
Thr Ala Ala Gly	Thr Ser Leu Asp Arg	Leu Val Thr Asp Val	Lys
	380	385	390
Glu Lys Leu Lys	Gln Ala Lys Lys Phe	Trp Ser Ser Leu Pro	Ser
	395	400	405
Asn Val Cys Asn	Asp Glu Arg Met Ala	Ala Gly Asn Gly Asn	Glu
	410	415	420
Asp Asp Cys Trp	Asn Gly Lys Gly Lys	Ser Arg Tyr Leu Phe	Ala
	425	430	435
Val Thr Gly Asn	Gly Leu Ala Asn Gln	Gly Asn Asn Pro Glu	Val
	440	445	450
Gln Val Asp Thr	Ser Lys Pro Asp Ile	Leu Ile Leu Arg Gln	Ile
	455	460	465
Met Ala Leu Arg	Val Met Thr Ser Lys	Met Lys Asn Ala Tyr	Asn
	470	475	480
Gly Asn Asp Val	Asp Phe Phe Asp Ile	Ser Asp Glu Ser Ser	Gly
	485	490	495
Glu Gly Ser Gly	Ser Gly Cys Glu Tyr	Gln Gln Cys Pro Ser	Glu
	500	505	510
Phe Asp Tyr Asn	Ala Thr Asp His Ala	Gly Lys Ser Ala Asn	Glu

	515		520		525									
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu
	530				535				540					
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp
	545				550				555					

Arg

<210> 25
 <211> 870
 <212> DNA
 <213> Homo Sapien

<400> 25
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 cgatgaaagt tctaattctt tccctcctcc tgttgctgcc actaatgctg 200
 atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250
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 gtgtctgggc tgccaaagaa gcagtgcccc tgtgatcatt tcaagggcaa 400
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 actctccac tgtaccacc cctaaatcat tccagtgtc tcaaaaagca 650
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<210> 26
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 26

Met	Lys	Val	Leu	Ile	Ser	Ser	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Met
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Leu	Met	Ser	Met	Val	Ser	Ser	Ser	Leu	Asn	Pro	Gly	Val	Ala	Arg
				20					25					30
Gly	His	Arg	Asp	Arg	Gly	Gln	Ala	Ser	Arg	Arg	Trp	Leu	Gln	Glu
				35					40					45
Gly	Gly	Gln	Glu	Cys	Glu	Cys	Lys	Asp	Trp	Phe	Leu	Arg	Ala	Pro
				50					55					60
Arg	Arg	Lys	Phe	Met	Thr	Val	Ser	Gly	Leu	Pro	Lys	Lys	Gln	Cys
				65					70					75
Pro	Cys	Asp	His	Phe	Lys	Gly	Asn	Val	Lys	Lys	Thr	Arg	His	Gln
				80					85					90
Arg	His	His	Arg	Lys	Pro	Asn	Lys	His	Ser	Arg	Ala	Cys	Gln	Gln
				95					100					105
Phe	Leu	Lys	Gln	Cys	Gln	Leu	Arg	Ser	Phe	Ala	Leu	Pro	Leu	
				110					115					

<210> 27

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 27

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gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
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cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300
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<210> 28
 <211> 277
 <212> PRT
 <213> Homo Sapien

<400> 28
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 Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro
 35 40 45
 Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser
 50 55 60
 Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
 65 70 75
 Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro
 80 85 90
 Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys
 95 100 105
 Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu

	110	115	120
Arg Phe Val Val	Ala Pro Gly Glu Asp	Met Arg Gln Leu Ala Asp	
	125	130	135
Gly Ser Met Asp	Val Val Val Cys Thr	Leu Val Leu Cys Ser Val	
	140	145	150
Gln Ser Pro Arg	Lys Val Leu Gln Glu	Val Arg Arg Val Leu Arg	
	155	160	165
Pro Gly Gly Val	Leu Phe Phe Trp Glu	His Val Ala Glu Pro Tyr	
	170	175	180
Gly Ser Trp Ala	Phe Met Trp Gln Gln	Val Phe Glu Pro Thr Trp	
	185	190	195
Lys His Ile Gly	Asp Gly Cys Cys Leu	Thr Arg Glu Thr Trp Lys	
	200	205	210
Asp Leu Glu Asn	Ala Gln Phe Ser Glu	Ile Gln Met Glu Arg Gln	
	215	220	225
Pro Pro Pro Leu	Lys Trp Leu Pro Val	Gly Pro His Ile Met Gly	
	230	235	240
Lys Ala Val Lys	Gln Ser Phe Pro Ser	Ser Lys Ala Leu Ile Cys	
	245	250	255
Ser Phe Pro Ser	Leu Gln Leu Glu Gln	Ala Thr His Gln Pro Ile	
	260	265	270
Tyr Leu Pro Leu	Arg Gly Thr		
	275		

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

<400> 29
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 gactgggtcgg tgcccagaaa gtctcttctg ccaactgacgc ccccatcagg 150
 gattgggcct tctttccccc ttcttttctg tgtctcctgc ctcacgggcc 200
 tgccatgacc tgcagccaag ccagcccccg tggggaaggg gagaaagtgg 250
 gggatggcta agaaagctgg gagatagggg acagaagagg gtagtgggtg 300
 ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350
 atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400

cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450

taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30

<211> 73

<212> PRT

<213> Homo Sapien

<400> 30

Met	Leu	Leu	Leu	Thr	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Lys	Gly
1				5				10					15

Ser	Cys	Leu	Glu	Trp	Gly	Leu	Val	Gly	Ala	Gln	Lys	Val	Ser	Ser
			20					25						30

Ala	Thr	Asp	Ala	Pro	Ile	Arg	Asp	Trp	Ala	Phe	Phe	Pro	Pro	Ser
			35					40						45

Phe	Leu	Cys	Leu	Leu	Pro	His	Arg	Pro	Ala	Met	Thr	Cys	Ser	Gln
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Ala	Gln	Pro	Arg	Gly	Glu	Gly	Glu	Lys	Val	Gly	Asp	Gly
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<211> 1660

<212> DNA

<213> Homo Sapien

<400> 31

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 <211> 445
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
 50 55 60

Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys	
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Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu	
				80					85					90	
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val	
				95					100					105	
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe	
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Leu	Leu	Phe	Gln	Pro	Leu	Trp	Thr	Phe	Ala	Ile	Leu	Ile	Phe	Phe	
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Trp	Val	Leu	Trp	Val	Ala	Val	Leu	Leu	Ser	Leu	Gly	Thr	Ala	Gly	
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Ala	Ala	Gln	Val	Met	Glu	Gly	Gly	Gln	Val	Glu	Tyr	Lys	Pro	Leu	
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Ser	Gly	Ile	Arg	Tyr	Met	Trp	Ser	Tyr	His	Leu	Ile	Gly	Leu	Ile	
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Trp	Thr	Ser	Glu	Phe	Ile	Leu	Ala	Cys	Gln	Gln	Met	Thr	Ile	Ala	
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Gly	Ala	Val	Val	Thr	Cys	Tyr	Phe	Asn	Arg	Ser	Lys	Asn	Asp	Pro	
				200					205					210	
Pro	Asp	His	Pro	Ile	Leu	Ser	Ser	Leu	Ser	Ile	Leu	Phe	Phe	Tyr	
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His	Gln	Gly	Thr	Val	Val	Lys	Gly	Ser	Phe	Leu	Ile	Ser	Val	Val	
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Arg	Ile	Pro	Arg	Ile	Ile	Val	Met	Tyr	Met	Gln	Asn	Ala	Leu	Lys	
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Glu	Gln	Gln	His	Gly	Ala	Leu	Ser	Arg	Tyr	Leu	Phe	Arg	Cys	Cys	
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Tyr	Cys	Cys	Phe	Trp	Cys	Leu	Asp	Lys	Tyr	Leu	Leu	His	Leu	Asn	
				275					280					285	
Gln	Asn	Ala	Tyr	Thr	Thr	Thr	Ala	Ile	Asn	Gly	Thr	Asp	Phe	Cys	
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Thr	Ser	Ala	Lys	Asp	Ala	Phe	Lys	Ile	Leu	Ser	Lys	Asn	Ser	Ser	
				305					310					315	
His	Phe	Thr	Ser	Ile	Asn	Cys	Phe	Gly	Asp	Phe	Ile	Ile	Phe	Leu	
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Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met	
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Ala	Phe	Asn	Tyr	Asn	Arg	Ala	Phe	Gln	Val	Trp	Ala	Val	Pro	Leu	
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Leu	Leu	Val	Ala	Phe	Phe	Ala	Tyr	Leu	Val	Ala	His	Ser	Phe	Leu	
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Ser	Val	Phe	Glu	Thr	Val	Leu	Asp	Ala	Leu	Phe	Leu	Cys	Phe	Ala	
				380					385					390	
Val	Asp	Leu	Glu	Thr	Asn	Asp	Gly	Ser	Ser	Glu	Lys	Pro	Tyr	Phe	
				395					400					405	
Met	Asp	Gln	Glu	Phe	Leu	Ser	Phe	Val	Lys	Arg	Ser	Asn	Lys	Leu	
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Asn	Asn	Ala	Arg	Ala	Gln	Gln	Asp	Lys	His	Ser	Leu	Arg	Asn	Glu	
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 <212> DNA
 <213> Homo Sapien

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<210> 34
 <211> 678
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60
 Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75
 Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90
 His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105
 Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120
 Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135

Leu Glu Ser Lys	Pro Lys Lys Gly Val	Thr Tyr Pro Ser Ala Leu	140	145	150
Thr Tyr Ser Ser	Ser Lys Ser Pro Ala	Ala Gln Ala Gly Glu Thr	155	160	165
Thr Lys Ala Tyr	Gln Arg Pro Pro Ile	Pro Gly Thr Thr Ala Gln	170	175	180
Pro Val Thr Leu	Met Gln Leu Leu Ala	Val Thr Val Ala Val Ala	185	190	195
Thr Pro Thr Thr	Leu Pro Arg Pro Ser	Pro Ser Ala Ala Ser Thr	200	205	210
Thr Ser Ile Pro	Arg Pro Gln Ser Val	Gly His Arg Ser Gln Glu	215	220	225
Met Asp Leu Trp	Ser Thr Ala Thr Tyr	Thr Ser Ser Gln Asn Arg	230	235	240
Pro Arg Ala Asp	Pro Gly Ile Gln Arg	Gln Asp Pro Ser Gly Ala	245	250	255
Ala Phe Gln Lys	Pro Val Gly Ala Asp	Val Ser Leu Gly Leu Val	260	265	270
Pro Lys Glu Glu	Leu Ser Thr Gln Ser	Leu Glu Pro Val Ser Leu	275	280	285
Gly Asp Pro Asn	Cys Lys Ile Asp Leu	Ser Phe Leu Ile Asp Gly	290	295	300
Ser Thr Ser Ile	Gly Lys Arg Arg Phe	Arg Ile Gln Lys Gln Leu	305	310	315
Leu Ala Asp Val	Ala Gln Ala Leu Asp	Ile Gly Pro Ala Gly Pro	320	325	330
Leu Met Gly Val	Val Gln Tyr Gly Asp	Asn Pro Ala Thr His Phe	335	340	345
Asn Leu Lys Thr	His Thr Asn Ser Arg	Asp Leu Lys Thr Ala Ile	350	355	360
Glu Lys Ile Thr	Gln Arg Gly Gly Leu	Ser Asn Val Gly Arg Ala	365	370	375
Ile Ser Phe Val	Thr Lys Asn Phe Phe	Ser Lys Ala Asn Gly Asn	380	385	390
Arg Ser Gly Ala	Pro Asn Val Val Val	Val Met Val Asp Gly Trp	395	400	405
Pro Thr Asp Lys	Val Glu Glu Ala Ser	Arg Leu Ala Arg Glu Ser	410	415	420

Gly Ile Asn Ile Phe Phe Ile Thr Ile Glu Gly Ala Ala Glu Asn	425	430	435
Glu Lys Gln Tyr Val Val Glu Pro Asn Phe Ala Asn Lys Ala Val	440	445	450
Cys Arg Thr Asn Gly Phe Tyr Ser Leu His Val Gln Ser Trp Phe	455	460	465
Gly Leu His Lys Thr Leu Gln Pro Leu Val Lys Arg Val Cys Asp	470	475	480
Thr Asp Arg Leu Ala Cys Ser Lys Thr Cys Leu Asn Ser Ala Asp	485	490	495
Ile Gly Phe Val Ile Asp Gly Ser Ser Ser Val Gly Thr Gly Asn	500	505	510
Phe Arg Thr Val Leu Gln Phe Val Thr Asn Leu Thr Lys Glu Phe	515	520	525
Glu Ile Ser Asp Thr Asp Thr Arg Ile Gly Ala Val Gln Tyr Thr	530	535	540
Tyr Glu Gln Arg Leu Glu Phe Gly Phe Asp Lys Tyr Ser Ser Lys	545	550	555
Pro Asp Ile Leu Asn Ala Ile Lys Arg Val Gly Tyr Trp Ser Gly	560	565	570
Gly Thr Ser Thr Gly Ala Ala Ile Asn Phe Ala Leu Glu Gln Leu	575	580	585
Phe Lys Lys Ser Lys Pro Asn Lys Arg Lys Leu Met Ile Leu Ile	590	595	600
Thr Asp Gly Arg Ser Tyr Asp Asp Val Arg Ile Pro Ala Met Ala	605	610	615
Ala His Leu Lys Gly Val Ile Thr Tyr Ala Ile Gly Val Ala Trp	620	625	630
Ala Ala Gln Glu Glu Leu Glu Val Ile Ala Thr His Pro Ala Arg	635	640	645
Asp His Ser Phe Phe Val Asp Glu Phe Asp Asn Leu His Gln Tyr	650	655	660
Val Pro Arg Ile Ile Gln Asn Ile Cys Thr Glu Phe Asn Ser Gln	665	670	675

Pro Arg Asn

<210> 35
 <211> 2095
 <212> DNA

<213> Homo Sapien

<400> 35

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<210> 36
 <211> 331
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg
 50 55 60
 Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
 65 70 75
 Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
 80 85 90
 Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
 95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln	110	115	120
Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp	125	130	135
Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp	140	145	150
Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp	155	160	165
Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp	170	175	180
Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu	185	190	195
Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile	200	205	210
Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser	215	220	225
Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly	230	235	240
Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu	245	250	255
Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val	260	265	270
Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu	275	280	285
Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys	290	295	300
Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu	305	310	315
Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His	320	325	330

Tyr

<210> 37
 <211> 2846
 <212> DNA
 <213> Homo Sapien

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 gaagaaagaa actgctcaga ccctgggggc ccagtcaatg ggtaccagaa 900
 aataacaggg ggccctgggc ttatcaacgg acgcatgct aaaattggca 950
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 aaaagaactt gccagcagaa tggagagtgg tcagggaac agcccatctg 1050
 cataaaagcc tgccgagaac caaagatttc agacctgtg agaaggagag 1100
 ttcttccgat gcaggttcag tcaagggaga caccattaca ccagctatac 1150
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 ggttgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450
 catgacggca gcctacacaa gggagcgtgg ttcttagtct gcagcgggtc 1500
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<210> 38
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 38

Met	Glu	Leu	Gly	Cys	Trp	Thr	Gln	Leu	Gly	Leu	Thr	Phe	Leu	Gln	1	5	10	15
Leu	Leu	Leu	Ile	Ser	Ser	Leu	Pro	Arg	Glu	Tyr	Thr	Val	Ile	Asn	20	25	30	
Glu	Ala	Cys	Pro	Gly	Ala	Glu	Trp	Asn	Ile	Met	Cys	Arg	Glu	Cys	35	40	45	
Cys	Glu	Tyr	Asp	Gln	Ile	Glu	Cys	Val	Cys	Pro	Gly	Lys	Arg	Glu	50	55	60	
Val	Val	Gly	Tyr	Thr	Ile	Pro	Cys	Cys	Arg	Asn	Glu	Glu	Asn	Glu	65	70	75	
Cys	Asp	Ser	Cys	Leu	Ile	His	Pro	Gly	Cys	Thr	Ile	Phe	Glu	Asn	80	85	90	
Cys	Lys	Ser	Cys	Arg	Asn	Gly	Ser	Trp	Gly	Gly	Thr	Leu	Asp	Asp	95	100	105	
Phe	Tyr	Val	Lys	Gly	Phe	Tyr	Cys	Ala	Glu	Cys	Arg	Ala	Gly	Trp	110	115	120	
Tyr	Gly	Gly	Asp	Cys	Met	Arg	Cys	Gly	Gln	Val	Leu	Arg	Ala	Pro	125	130	135	
Lys	Gly	Gln	Ile	Leu	Leu	Glu	Ser	Tyr	Pro	Leu	Asn	Ala	His	Cys	140	145	150	
Glu	Trp	Thr	Ile	His	Ala	Lys	Pro	Gly	Phe	Val	Ile	Gln	Leu	Arg	155	160	165	
Phe	Val	Met	Leu	Ser	Leu	Glu	Phe	Asp	Tyr	Met	Cys	Gln	Tyr	Asp	170	175	180	
Tyr	Val	Glu	Val	Arg	Asp	Gly	Asp	Asn	Arg	Asp	Gly	Gln	Ile	Ile	185	190	195	
Lys	Arg	Val	Cys	Gly	Asn	Glu	Arg	Pro	Ala	Pro	Ile	Gln	Ser	Ile	200	205	210	
Gly	Ser	Ser	Leu	His	Val	Leu	Phe	His	Ser	Asp	Gly	Ser	Lys	Asn	215	220	225	
Phe	Asp	Gly	Phe	His	Ala	Ile	Tyr	Glu	Glu	Ile	Thr	Ala	Cys	Ser	230	235	240	
Ser	Ser	Pro	Cys	Phe	His	Asp	Gly	Thr	Cys	Val	Leu	Asp	Lys	Ala	245	250	255	
Gly	Ser	Tyr	Lys	Cys	Ala	Cys	Leu	Ala	Gly	Tyr	Thr	Gly	Gln	Arg	260	265	270	
Cys	Glu	Asn	Leu	Leu	Glu	Glu	Arg	Asn	Cys	Ser	Asp	Pro	Gly	Gly	275	280	285	

Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile	290	295	300
Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys	305	310	315
Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln	320	325	330
Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala	335	340	345
Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu	350	355	360
Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr	365	370	375
Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys	380	385	390
Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His	395	400	405
Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg	410	415	420
Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp	425	430	435
Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu	440	445	450
Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln	455	460	465
Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu	470	475	480
His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn	485	490	495
Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly	500	505	510
Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly	515	520	525
Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser	530	535	540
Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile	545	550	555
Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala	560	565	570

Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg	575	580	585
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly	590	595	600
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp	605	610	615
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys	620	625	630
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp	635	640	645
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile	650	655	660
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	665	670	675
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser	680	685	690
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe	695	700	705
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys	710	715	720

<210> 39
 <211> 2571
 <212> DNA
 <213> Homo Sapien

<400> 39
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 ttgtgatcta ctgattgtgg gggcatggca aggtttgctt aaaggagctt 150
 ggctggtttg ggcccttgta gctgacagaa ggtggccagg gagaatgcag 200
 cacactgctc ggagaatgaa ggcgcttctg ttgctggtct tgccttggt 250
 cagtctgct aactacattg acaatgtggg caacctgcac ttctgtatt 300
 cagaactctg taaaggtgcc tccactacg gctgaccaa agataggaag 350
 aggcgctcac aagatggctg tccagacggc tgtgagagcc tcacagccac 400
 ggctccctcc ccagaggttt ctgcagctgc caccatctcc ttaatgacag 450
 acgagcctgg cctagacaac cctgcctacg tgtcctcggc agaggacggg 500
 cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550

acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
 atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650
 aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700
 agtctttcca aggttgtagc acctgattcc agatgggtgaa attaccagca 750
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 cttcaatgtg ctggatggcg gtgtggcata tcgacatggt cagcttgagg 1200
 agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250
 ccagaaagtg cggtcatct gattcaggcc agtgaaagac gtgttcacct 1300
 cgtcgtgtcc cgccagggtc ggcagcggag ccctgacatc tttcaggaag 1350
 ccggctggaa cagcaatggc agctgggtcc caggggccagg ggagaggagc 1400
 aacactccca agccctcca tcctacaatt acttgtcatg agaagggtgt 1450
 aaatatccaa aaagaccccg gtgaatctct cggcatgacc gtcgcagggg 1500
 gagcatcaca tagagaatgg gatttgcta tctatgtcat cagtgttgag 1550
 cccggaggag tcataagcag agatggaaga ataaaaacag gtgacatttt 1600
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 cgaagaaaca cagctggaag tctgggcttc tgcattgtag gaggttatga 1900
 agaatacaat ggaaacaaac cttttttcat caaatccatt gttgaaggaa 1950

caccagcata caatgatgga agaattagat gtggtgatat tcttcttgct 2000
gtcaatggta gaagtacatc aggaatgata catgcttgct tggcaagact 2050
gctgaaagaa cttaaaggaa gaattactct aactattggt tcttggcctg 2100
gcactttttt atagaatcaa tgatgggtca gaggaaaaca gaaaaatcac 2150
aaataggcta agaagttgaa acactatatt tatcttgta gtttttatat 2200
ttaaagaaag aatacattgt aaaaatgtca ggaaaagtat gatcatctaa 2250
tgaaagccag ttacacctca gaaaatatga ttccaaaaaa attaaaacta 2300
ctagtttttt ttcagtgtgg aggatttctc attactctac aacattgttt 2350
atattttttc tattcaataa aaagccctaa aacaactaaa atgattgatt 2400
tgtatacccc actgaattca agctgattta aatttaaaat ttggtatatg 2450
ctgaagtctg ccaagggtac attatggcca tttttaattt acagctaaaa 2500
tattttttta aatgcattgc tgagaaacgt tgctttcatc aaacaagaat 2550
aaatattttt cagaagttaa a 2571

<210> 40
<211> 632
<212> PRT
<213> Homo Sapien

<400> 40
Met Lys Ala Leu Leu Leu Val Leu Pro Trp Leu Ser Pro Ala
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20 25 30
Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
35 40 45
Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
50 55 60
Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser
65 70 75
Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser
80 85 90
Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly
95 100 105
Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile
110 115 120
Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu

	125	130	135
Arg Arg Thr Lys	Ser Gly Ser Ala Val	Ala Asn His Ala Asp	Gln
	140	145	150
Gly Arg Glu Asn	Ser Glu Asn Thr Thr	Ala Pro Glu Val Phe	Pro
	155	160	165
Arg Leu Tyr His	Leu Ile Pro Asp Gly	Glu Ile Thr Ser Ile	Lys
	170	175	180
Ile Asn Arg Val	Asp Pro Ser Glu Ser	Leu Ser Ile Arg Leu	Val
	185	190	195
Gly Gly Ser Glu	Thr Pro Leu Val His	Ile Ile Ile Gln His	Ile
	200	205	210
Tyr Arg Asp Gly	Val Ile Ala Arg Asp	Gly Arg Leu Leu Pro	Gly
	215	220	225
Asp Ile Ile Leu	Lys Val Asn Gly Met	Asp Ile Ser Asn Val	Pro
	230	235	240
His Asn Tyr Ala	Val Arg Leu Leu Arg	Gln Pro Cys Gln Val	Leu
	245	250	255
Trp Leu Thr Val	Met Arg Glu Gln Lys	Phe Arg Ser Arg Asn	Asn
	260	265	270
Gly Gln Ala Pro	Asp Ala Tyr Arg Pro	Arg Asp Asp Ser Phe	His
	275	280	285
Val Ile Leu Asn	Lys Ser Ser Pro Glu	Glu Gln Leu Gly Ile	Lys
	290	295	300
Leu Val Arg Lys	Val Asp Glu Pro Gly	Val Phe Ile Phe Asn	Val
	305	310	315
Leu Asp Gly Gly	Val Ala Tyr Arg His	Gly Gln Leu Glu Glu	Asn
	320	325	330
Asp Arg Val Leu	Ala Ile Asn Gly His	Asp Leu Arg Tyr Gly	Ser
	335	340	345
Pro Glu Ser Ala	Ala His Leu Ile Gln	Ala Ser Glu Arg Arg	Val
	350	355	360
His Leu Val Val	Ser Arg Gln Val Arg	Gln Arg Ser Pro Asp	Ile
	365	370	375
Phe Gln Glu Ala	Gly Trp Asn Ser Asn	Gly Ser Trp Ser Pro	Gly
	380	385	390
Pro Gly Glu Arg	Ser Asn Thr Pro Lys	Pro Leu His Pro Thr	Ile
	395	400	405
Thr Cys His Glu	Lys Val Val Asn Ile	Gln Lys Asp Pro Gly	Glu

	410	415	420
Ser Leu Gly Met	Thr Val Ala Gly Gly	Ala Ser His Arg Glu	Trp
	425	430	435
Asp Leu Pro Ile	Tyr Val Ile Ser Val	Glu Pro Gly Gly Val	Ile
	440	445	450
Ser Arg Asp Gly	Arg Ile Lys Thr Gly	Asp Ile Leu Leu Asn	Val
	455	460	465
Asp Gly Val Glu	Leu Thr Glu Val Ser	Arg Ser Glu Ala Val	Ala
	470	475	480
Leu Leu Lys Arg	Thr Ser Ser Ser Ile	Val Leu Lys Ala Leu	Glu
	485	490	495
Val Lys Glu Tyr	Glu Pro Gln Glu Asp	Cys Ser Ser Pro Ala	Ala
	500	505	510
Leu Asp Ser Asn	His Asn Met Ala Pro	Pro Ser Asp Trp Ser	Pro
	515	520	525
Ser Trp Val Met	Trp Leu Glu Leu Pro	Arg Cys Leu Tyr Asn	Cys
	530	535	540
Lys Asp Ile Val	Leu Arg Arg Asn Thr	Ala Gly Ser Leu Gly	Phe
	545	550	555
Cys Ile Val Gly	Gly Tyr Glu Glu Tyr	Asn Gly Asn Lys Pro	Phe
	560	565	570
Phe Ile Lys Ser	Ile Val Glu Gly Thr	Pro Ala Tyr Asn Asp	Gly
	575	580	585
Arg Ile Arg Cys	Gly Asp Ile Leu Leu	Ala Val Asn Gly Arg	Ser
	590	595	600
Thr Ser Gly Met	Ile His Ala Cys Leu	Ala Arg Leu Leu Lys	Glu
	605	610	615
Leu Lys Gly Arg	Ile Thr Leu Thr Ile	Val Ser Trp Pro Gly	Thr
	620	625	630

Phe Leu

<210> 41

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 41

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 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgccca ttcaagagat tcctaaagca 250
 aaggagttca tggctaattt ccataagacc ctcatTTtgg ggaagggaaa 300
 aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
 cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400
 gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
 ccggtatcgc cctcaggaat gtaaagcttt acagagggtc gccatcctcg 500
 ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
 catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
 ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
 atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
 gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
 tccaagcat ctggtgggtg gcaggaacag cactgggtac aggttacgtt 800
 acagtggata ttttgggggt gttactgccc taagcagaga gcagtttttc 850
 aaggtgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900
 tgacctcaga ctcaggggtg agctccaaag aatgaaaatt tcccgccccc 950
 tgctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000
 aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
 ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgtgg 1100
 aacacaatcc tttatatatc aacatcacag tggatttctg gtttgggtgca 1150
 tgaccctgga tcttttgggt atgtttggaa gaactgattc tttgtttgca 1200
 ataattttgg cctagagact tcaaatagta gcacacatta agaacctgtt 1250
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 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
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 cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
 tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatattaac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 42
 Met Gly Phe Asn Leu Thr Phe His Leu Ser Tyr Lys Phe Arg Leu
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 Leu Leu Leu Leu Thr Leu Cys Leu Thr Val Val Gly Trp Ala Thr
 20 25 30
 Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
 35 40 45
 Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
 50 55 60
 Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
 65 70 75
 Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
 80 85 90
 Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
 95 100 105
 Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
 110 115 120
 Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
 125 130 135
 His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
 140 145 150
 Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
 155 160 165

Lys	Lys	Phe	Asn	Arg	Ala	Lys	Leu	Leu	Asn	Val	Gly	Tyr	Leu	Glu	170	175	180
Ala	Leu	Lys	Glu	Glu	Asn	Trp	Asp	Cys	Phe	Ile	Phe	His	Asp	Val	185	190	195
Asp	Leu	Val	Pro	Glu	Asn	Asp	Phe	Asn	Leu	Tyr	Lys	Cys	Glu	Glu	200	205	210
His	Pro	Lys	His	Leu	Val	Val	Gly	Arg	Asn	Ser	Thr	Gly	Tyr	Arg	215	220	225
Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg	230	235	240
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly	245	250	255
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln	260	265	270
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr	275	280	285
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu	290	295	300
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp	305	310	315
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn	320	325	330
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala		335	340	

<210> 43
 <211> 485
 <212> DNA
 <213> Homo Sapien

<400> 43
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 ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
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 acctgccctg ccccgctccc ctcccttctt tattttattcc tgctgcccc 350
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<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

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Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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gcctctggac ccgtgaaaga gctggctcgt tccgttggtg gggccgtgac 150

tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200

tcaacacaac ccctcttgtc accatacagc cagaaggggg cactatcata 250

gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300

ctccctgaag ctgagcaaac tgaagaagaa tgactcaggg atctactatg 350

tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400

ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450

gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500

atggggaaga ggatgtgatt tatacctgga aggccctggg gcaagcagcc 550

aatgagtccc ataatgggtc catcctcccc atctcctgga gatggggaga 600
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tctcaagccc catccttgcc aggaagctct gtgaagggtc tgctgatgac 700
ccagattcct ccatggctct cctgtgtctc ctgttggtgc cctcctgct 750
cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
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tcacactaat agaacaatcc taaaggaaga tccagcaaat acggtttact 950
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atgccagaca caccaaggct atttgcctat gagaatgtta tctagacagc 1050
agtgcactcc cctaagtctc tgctca 1076

<210> 46
<211> 335
<212> PRT
<213> Homo Sapien

<400> 46
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Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
20 25 30
Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
35 40 45
Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
50 55 60
Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
65 70 75
Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
80 85 90
Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
95 100 105
Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
110 115 120
Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
125 130 135
Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
140 145 150

Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys
				155					160					165
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu
				170					175					180
Pro	Ile	Ser	Trp	Arg	Trp	Gly	Glu	Ser	Asp	Met	Thr	Phe	Ile	Cys
				185					190					195
Val	Ala	Arg	Asn	Pro	Val	Ser	Arg	Asn	Phe	Ser	Ser	Pro	Ile	Leu
				200					205					210
Ala	Arg	Lys	Leu	Cys	Glu	Gly	Ala	Ala	Asp	Asp	Pro	Asp	Ser	Ser
				215					220					225
Met	Val	Leu	Leu	Cys	Leu	Leu	Leu	Val	Pro	Leu	Leu	Leu	Ser	Leu
				230					235					240
Phe	Val	Leu	Gly	Leu	Phe	Leu	Trp	Phe	Leu	Lys	Arg	Glu	Arg	Gln
				245					250					255
Glu	Glu	Tyr	Ile	Glu	Glu	Lys	Lys	Arg	Val	Asp	Ile	Cys	Arg	Glu
				260					265					270
Thr	Pro	Asn	Ile	Cys	Pro	His	Ser	Gly	Glu	Asn	Thr	Glu	Tyr	Asp
				275					280					285
Thr	Ile	Pro	His	Thr	Asn	Arg	Thr	Ile	Leu	Lys	Glu	Asp	Pro	Ala
				290					295					300
Asn	Thr	Val	Tyr	Ser	Thr	Val	Glu	Ile	Pro	Lys	Lys	Met	Glu	Asn
				305					310					315
Pro	His	Ser	Leu	Leu	Thr	Met	Pro	Asp	Thr	Pro	Arg	Leu	Phe	Ala
				320					325					330
Tyr	Glu	Asn	Val	Ile										
				335										

<210> 47

<211> 766

<212> DNA

<213> Homo Sapien

<400> 47

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ttctcaatgc gataacctcta attgtcagct tagttgagga agaccaatatt 150
tctcaaaacc ccatctcttg ctttgagtgg tggttcccag gaattatagg 200
agcagggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
aaagagcgtg ctgcaacaac agaactggaa tgtttctttc atcatttttc 300

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agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350
 ggctctcttta aaaggctctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactggttt 500
 caataaaccc accagtaacg acaccatggc gagtggctgg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcattcggtt tccttggtcg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 48
 <211> 229
 <212> PRT
 <213> Homo Sapien

<400> 48
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 20 25 30
 Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
 35 40 45
 Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu
 50 55 60
 Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg
 65 70 75
 Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe
 80 85 90
 Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser
 95 100 105
 Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser
 110 115 120
 Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp
 125 130 135
 Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser
 140 145 150
 Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr

155	160	165
Met Ala Ser Gly Trp Arg Ala Ser Ser Phe His Phe Asp Ser Glu		
170	175	180
Glu Asn Lys His Arg Leu Ile His Phe Ser Val Phe Leu Gly Leu		
185	190	195
Leu Leu Val Gly Ile Leu Glu Val Leu Phe Gly Leu Ser Gln Ile		
200	205	210
Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg		
215	220	225

Ser Gln Ile Val

<210> 49
 <211> 636
 <212> DNA
 <213> Homo Sapien

<400> 49
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 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
 agagagtgac cctggccctt ctctactgg caggcctgac tgccttggaa 250
 gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggatcgcggc agttctgagt ggcaaatgca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaaggccatc ccaactcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
 taacactggc cccagcacc tcctcccctg ggaggcctta tcctcaagga 550
 aggacttctc tccaagggca ggctgttagg cccctttctg atcaggaggc 600
 ttctttatga attaaactcg cccaccacc ccctca 636

<210> 50
 <211> 89
 <212> PRT
 <213> Homo Sapien

<400> 50
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 1 5 10 15

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				20					25					30
Tyr	Tyr	Asp	Trp	Lys	Asn	Leu	Gln	Leu	Ser	Gly	Leu	Ile	Cys	Gly
				35					40					45
Gly	Leu	Leu	Ala	Ile	Ala	Gly	Ile	Ala	Ala	Val	Leu	Ser	Gly	Lys
				50					55					60
Cys	Lys	Tyr	Lys	Ser	Ser	Gln	Lys	Gln	His	Ser	Pro	Val	Pro	Glu
				65					70					75
Lys	Ala	Ile	Pro	Leu	Ile	Thr	Pro	Gly	Ser	Ala	Thr	Thr	Cys	
				80					85					

<210> 51
 <211> 1734
 <212> DNA
 <213> Homo Sapien

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 agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
 cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
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 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
 caaagaggcc ggaggggcag ctggctctaa agtcagttag gcccttggcc 400
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
 ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
 gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
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 ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
 caacactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
 gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctcaaggagg 900

ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtg 950
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 gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
 agtggtgga gacagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
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 ggaggtgacg ctgttggtgg agtcaatact gtgaactctg agacgtctcc 1400
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 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 52
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 Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90

Ala	Ala	Asp	Ala	Leu	Gly	Asn	Arg	Val	Gly	Glu	Ala	Ala	His	Ala	
				95					100					105	
Leu	Gly	Asn	Thr	Gly	His	Glu	Ile	Gly	Arg	Gln	Ala	Glu	Asp	Val	
				110					115					120	
Ile	Arg	His	Gly	Ala	Asp	Ala	Val	Arg	Gly	Ser	Trp	Gln	Gly	Val	
				125					130					135	
Pro	Gly	His	Ser	Gly	Ala	Trp	Glu	Thr	Ser	Gly	Gly	His	Gly	Ile	
				140					145					150	
Phe	Gly	Ser	Gln	Gly	Gly	Leu	Gly	Gly	Gln	Gly	Gln	Gly	Asn	Pro	
				155					160					165	
Gly	Gly	Leu	Gly	Thr	Pro	Trp	Val	His	Gly	Tyr	Pro	Gly	Asn	Ser	
				170					175					180	
Ala	Gly	Ser	Phe	Gly	Met	Asn	Pro	Gln	Gly	Ala	Pro	Trp	Gly	Gln	
				185					190					195	
Gly	Gly	Asn	Gly	Gly	Pro	Pro	Asn	Phe	Gly	Thr	Asn	Thr	Gln	Gly	
				200					205					210	
Ala	Val	Ala	Gln	Pro	Gly	Tyr	Gly	Ser	Val	Arg	Ala	Ser	Asn	Gln	
				215					220					225	
Asn	Glu	Gly	Cys	Thr	Asn	Pro	Pro	Pro	Ser	Gly	Ser	Gly	Gly	Gly	
				230					235					240	
Ser	Ser	Asn	Ser	Gly	Gly	Gly	Ser	Gly	Ser	Gln	Ser	Gly	Ser	Ser	
				245					250					255	
Gly	Ser	Gly	Ser	Asn	Gly	Asp	Asn	Asn	Asn	Gly	Ser	Ser	Ser	Gly	
				260					265					270	
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Gly	Ser	
				275					280					285	
Ser	Gly	Gly	Ser	Ser	Gly	Gly	Ser	Ser	Gly	Asn	Ser	Gly	Gly	Ser	
				290					295					300	
Arg	Gly	Asp	Ser	Gly	Ser	Glu	Ser	Ser	Trp	Gly	Ser	Ser	Thr	Gly	
				305					310					315	
Ser	Ser	Ser	Gly	Asn	His	Gly	Gly	Ser	Gly	Gly	Gly	Asn	Gly	His	
				320					325					330	
Lys	Pro	Gly	Cys	Glu	Lys	Pro	Gly	Asn	Glu	Ala	Arg	Gly	Ser	Gly	
				335					340					345	
Glu	Ser	Gly	Ile	Gln	Gly	Phe	Arg	Gly	Gln	Gly	Val	Ser	Ser	Asn	
				350					355					360	
Met	Arg	Glu	Ile	Ser	Lys	Glu	Gly	Asn	Arg	Leu	Leu	Gly	Gly	Ser	
				365					370					375	

Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly
				380					385					390
Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser
				395					400					405
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser
				410					415					420
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg
				425					430					435
Ser	Ser	Arg	Ile	Pro										
				440										

<210> 53
 <211> 1676
 <212> DNA
 <213> Homo Sapien

<400> 53
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 actcctgctg ctggttgtgg gctcctggct actcgcccgc atcctggctt 150
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 cccccaaaac ggaactggtt ttgggggtcac ctgggcctga tcaactcctac 250
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 cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcacccaa 400
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 agcatatcct ccagcacatg gactttctgt attacctctc ccatgacggg 800
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 catccgggag cggcgtcgca ccctccccac tcagggtatt gatgattttt 900
 tcaaagacaa agccaagtcc aagactttgg atttcattga tgtgcttctg 950

ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
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 tggcgacagg aggtgcaaga gcttctgaag gaccgcatc ctaaagagat 1150
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 gcaggcggtc gccatggcgg agatgaaagt ggtcctggcg ttgatgctgc 1500
 tgcacttccg gttcctgcca gaccacactg agccccgcag gaagctggaa 1550
 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600
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 gtcataaata aaacggtgct gtcaaa 1676

<210> 54
 <211> 524
 <212> PRT
 <213> Homo Sapien

<400> 54
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 20 25 30
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 35 40 45
 Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
 50 55 60
 Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
 65 70 75
 Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
 80 85 90
 Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
 95 100 105

Thr Ile Arg Ser	Ile Thr Asn Ala Ser	Ala Ala Ile Ala Pro	Lys
110	115		120
Asp Asn Leu Phe	Ile Arg Phe Leu Lys	Pro Trp Leu Gly Glu	Gly
125	130		135
Ile Leu Leu Ser	Gly Gly Asp Lys Trp	Ser Arg His Arg Arg	Met
140	145		150
Leu Thr Pro Ala	Phe His Phe Asn Ile	Leu Lys Ser Tyr Ile	Thr
155	160		165
Ile Phe Asn Lys	Ser Ala Asn Ile Met	Leu Asp Lys Trp Gln	His
170	175		180
Leu Ala Ser Glu	Gly Ser Ser Arg Leu	Asp Met Phe Glu His	Ile
185	190		195
Ser Leu Met Thr	Leu Asp Ser Leu Gln	Lys Cys Ile Phe Ser	Phe
200	205		210
Asp Ser His Cys	Gln Glu Arg Pro Ser	Glu Tyr Ile Ala Thr	Ile
215	220		225
Leu Glu Leu Ser	Ala Leu Val Glu Lys	Arg Ser Gln His Ile	Leu
230	235		240
Gln His Met Asp	Phe Leu Tyr Tyr Leu	Ser His Asp Gly Arg	Arg
245	250		255
Phe His Arg Ala	Cys Arg Leu Val His	Asp Phe Thr Asp Ala	Val
260	265		270
Ile Arg Glu Arg	Arg Arg Thr Leu Pro	Thr Gln Gly Ile Asp	Asp
275	280		285
Phe Phe Lys Asp	Lys Ala Lys Ser Lys	Thr Leu Asp Phe Ile	Asp
290	295		300
Val Leu Leu Leu	Ser Lys Asp Glu Asp	Gly Lys Ala Leu Ser	Asp
305	310		315
Glu Asp Ile Arg	Ala Glu Ala Asp Thr	Phe Met Phe Gly Gly	His
320	325		330
Asp Thr Thr Ala	Ser Gly Leu Ser Trp	Val Leu Tyr Asn Leu	Ala
335	340		345
Arg His Pro Glu	Tyr Gln Glu Arg Cys	Arg Gln Glu Val Gln	Glu
350	355		360
Leu Leu Lys Asp	Arg Asp Pro Lys Glu	Ile Glu Trp Asp Asp	Leu
365	370		375
Ala Gln Leu Pro	Phe Leu Thr Met Cys	Val Lys Glu Ser Leu	Arg
380	385		390

Leu	His	Pro	Pro	Ala	Pro	Phe	Ile	Ser	Arg	Cys	Cys	Thr	Gln	Asp
				395					400					405
Ile	Val	Leu	Pro	Asp	Gly	Arg	Val	Ile	Pro	Lys	Gly	Ile	Thr	Cys
				410					415					420
Leu	Ile	Asp	Ile	Ile	Gly	Val	His	His	Asn	Pro	Thr	Val	Trp	Pro
				425					430					435
Asp	Pro	Glu	Val	Tyr	Asp	Pro	Phe	Arg	Phe	Asp	Pro	Glu	Asn	Ser
				440					445					450
Lys	Gly	Arg	Ser	Pro	Leu	Ala	Phe	Ile	Pro	Phe	Ser	Ala	Gly	Pro
				455					460					465
Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val
				470					475					480
Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His
				485					490					495
Thr	Glu	Pro	Arg	Arg	Lys	Leu	Glu	Leu	Ile	Met	Arg	Ala	Glu	Gly
				500					505					510
Gly	Leu	Trp	Leu	Arg	Val	Glu	Pro	Leu	Asn	Val	Gly	Leu	Gln	
				515					520					

<210> 55
 <211> 644
 <212> DNA
 <213> Homo Sapien

<400> 55
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 tgtgttttgc acttaccctg tgttctgcct tttggtggca taacaaggga 150
 cttgcactta tcttctgcat tttgcagtct ttggcattga cgtggtacag 200
 cctttccttc ataccatttg caagggatgc tgtgaagaag tgttttgccg 250
 tgtgtcttgc ataattcatg gccagtttta tgaagctttg gaaggcacta 300
 tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350
 tacagacatg tgccttttat cttgcagcaa tgtgttgctt gtgattcgaa 400
 catttgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450
 cagtagcaca ggatgagaag tgggttctgt atcttgtgga gtggaatctt 500
 cctcatgtac ctgtttcctc tctggatggt gtccactga attcccatga 550
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

<210> 56

<211> 77

<212> PRT

<213> Homo Sapien

<400> 56

Met	Gly	Pro	Val	Lys	Gln	Leu	Lys	Arg	Met	Phe	Glu	Pro	Thr	Arg
1				5					10					15

Leu	Ile	Ala	Thr	Ile	Met	Val	Leu	Leu	Cys	Phe	Ala	Leu	Thr	Leu
				20					25					30

Cys	Ser	Ala	Phe	Trp	Trp	His	Asn	Lys	Gly	Leu	Ala	Leu	Ile	Phe
				35					40					45

Cys	Ile	Leu	Gln	Ser	Leu	Ala	Leu	Thr	Trp	Tyr	Ser	Leu	Ser	Phe
				50					55					60

Ile	Pro	Phe	Ala	Arg	Asp	Ala	Val	Lys	Lys	Cys	Phe	Ala	Val	Cys
				65					70					75

Leu Ala

<210> 57

<211> 3334

<212> DNA

<213> Homo Sapien

<400> 57

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cccagaccga gttccagtac tttgagtcga aggggctccc tgccgagctg 150

aagtccattt tcaagctcag tgtcttcac ccctcccagg aattctccac 200

ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250

atgggcagct agactttgaa gaatttgtcc attatctcca agatcatgag 300

aagaagctga ggctggtggt taagattttg gacaaaaaga atgatggacg 350

cattgacgcg caggagatca tgcagtcctt gcgggacttg ggagtcaaga 400

tatctgaaca gcaggcagaa aaaattctca agagcatgga taaaaacggc 450

acgatgacca tcgactggaa cgagtggaga gactaccacc tcctccaccc 500

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3334

<210> 58

<211> 469

<212> PRT

<213> Homo Sapien

<400> 58

Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln

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Thr Glu Phe Gln Tyr	Phe Glu Ser Lys	Gly Leu Pro Ala Glu	Leu
20		25	30
Lys Ser Ile Phe Lys	Leu Ser Val Phe	Ile Pro Ser Gln Glu	Phe
35		40	45
Ser Thr Tyr Arg Gln	Trp Lys Gln Lys	Ile Val Gln Ala Gly	Asp
50		55	60
Lys Asp Leu Asp Gly	Gln Leu Asp Phe	Glu Glu Phe Val His	Tyr
65		70	75
Leu Gln Asp His Glu	Lys Lys Leu Arg	Leu Val Phe Lys Ile	Leu
80		85	90
Asp Lys Lys Asn Asp	Gly Arg Ile Asp	Ala Gln Glu Ile Met	Gln
95		100	105
Ser Leu Arg Asp Leu	Gly Val Lys Ile	Ser Glu Gln Gln Ala	Glu
110		115	120
Lys Ile Leu Lys Ser	Met Asp Lys Asn	Gly Thr Met Thr Ile	Asp
125		130	135
Trp Asn Glu Trp Arg	Asp Tyr His Leu	Leu His Pro Val Glu	Asn
140		145	150
Ile Pro Glu Ile Ile	Leu Tyr Trp Lys	His Ser Thr Ile Phe	Asp
155		160	165
Val Gly Glu Asn Leu	Thr Val Pro Asp	Glu Phe Thr Val Glu	Glu
170		175	180
Arg Gln Thr Gly Met	Trp Trp Arg His	Leu Val Ala Gly Gly	Gly
185		190	195
Ala Gly Ala Val Ser	Arg Thr Cys Thr	Ala Pro Leu Asp Arg	Leu
200		205	210
Lys Val Leu Met Gln	Val His Ala Ser	Arg Ser Asn Asn Met	Gly
215		220	225
Ile Val Gly Gly Phe	Thr Gln Met Ile	Arg Glu Gly Gly Ala	Arg
230		235	240
Ser Leu Trp Arg Gly	Asn Gly Ile Asn	Val Leu Lys Ile Ala	Pro
245		250	255
Glu Ser Ala Ile Lys	Phe Met Ala Tyr	Glu Gln Ile Lys Arg	Leu
260		265	270
Val Gly Ser Asp Gln	Glu Thr Leu Arg	Ile His Glu Arg Leu	Val
275		280	285
Ala Gly Ser Leu Ala	Gly Ala Ile Ala	Gln Ser Ser Ile Tyr	Pro

290	295	300
Met Glu Val Leu Lys Thr Arg Met Ala Leu Arg Lys Thr Gly Gln		
305	310	315
Tyr Ser Gly Met Leu Asp Cys Ala Arg Arg Ile Leu Ala Arg Glu		
320	325	330
Gly Val Ala Ala Phe Tyr Lys Gly Tyr Val Pro Asn Met Leu Gly		
335	340	345
Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Thr Leu		
350	355	360
Lys Asn Ala Trp Leu Gln His Tyr Ala Val Asn Ser Ala Asp Pro		
365	370	375
Gly Val Phe Val Leu Leu Ala Cys Gly Thr Met Ser Ser Thr Cys		
380	385	390
Gly Gln Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met		
395	400	405
Gln Ala Gln Ala Ser Ile Glu Gly Ala Pro Glu Val Thr Met Ser		
410	415	420
Ser Leu Phe Lys His Ile Leu Arg Thr Glu Gly Ala Phe Gly Leu		
425	430	435
Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val		
440	445	450
Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly		
455	460	465
Val Gln Ser Arg		

<210> 59
 <211> 1658
 <212> DNA
 <213> Homo Sapien

<400> 59
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 atttcaggga gacactccat cacagtcact actgtcgcct cagctgggaa 200
 cattggggag gatggaatcc tgagctgcac ttttgaacct gacatcaaac 250
 tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatgtt 350

cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
ctttgctggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
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agaccttgcg gtgtgaggct ccccgatggg tccccagcc cacagtgggc 600
tgggcatccc aagttgacca gggagccaac ttctcggaag tctccaatac 650
cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750
attgccaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800
gctggagtac ctacagctgc taaactcaaa ggcttctctg tgtgtctctt 850
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aattgactgc cacttcgcaa ctgaggggag gctgcatttt agtaatgggt 1450
caaatgattc actttttatg atgcttccaa aggtgccttg gcttctcttc 1500
ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaa 1658

<210> 60
<211> 282

<212> PRT

<213> Homo Sapien

<400> 60

Met	Ala	Ser	Leu	Gly	Gln	Ile	Leu	Phe	Trp	Ser	Ile	Ile	Ser	Ile	
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Ile	Ile	Ile	Leu	Ala	Gly	Ala	Ile	Ala	Leu	Ile	Ile	Gly	Phe	Gly	
				20					25					30	
Ile	Ser	Gly	Arg	His	Ser	Ile	Thr	Val	Thr	Thr	Val	Ala	Ser	Ala	
				35					40					45	
Gly	Asn	Ile	Gly	Glu	Asp	Gly	Ile	Leu	Ser	Cys	Thr	Phe	Glu	Pro	
				50					55					60	
Asp	Ile	Lys	Leu	Ser	Asp	Ile	Val	Ile	Gln	Trp	Leu	Lys	Glu	Gly	
				65					70					75	
Val	Leu	Gly	Leu	Val	His	Glu	Phe	Lys	Glu	Gly	Lys	Asp	Glu	Leu	
				80					85					90	
Ser	Glu	Gln	Asp	Glu	Met	Phe	Arg	Gly	Arg	Thr	Ala	Val	Phe	Ala	
				95					100					105	
Asp	Gln	Val	Ile	Val	Gly	Asn	Ala	Ser	Leu	Arg	Leu	Lys	Asn	Val	
				110					115					120	
Gln	Leu	Thr	Asp	Ala	Gly	Thr	Tyr	Lys	Cys	Tyr	Ile	Ile	Thr	Ser	
				125					130					135	
Lys	Gly	Lys	Gly	Asn	Ala	Asn	Leu	Glu	Tyr	Lys	Thr	Gly	Ala	Phe	
				140					145					150	
Ser	Met	Pro	Glu	Val	Asn	Val	Asp	Tyr	Asn	Ala	Ser	Ser	Glu	Thr	
				155					160					165	
Leu	Arg	Cys	Glu	Ala	Pro	Arg	Trp	Phe	Pro	Gln	Pro	Thr	Val	Val	
				170					175					180	
Trp	Ala	Ser	Gln	Val	Asp	Gln	Gly	Ala	Asn	Phe	Ser	Glu	Val	Ser	
				185					190					195	
Asn	Thr	Ser	Phe	Glu	Leu	Asn	Ser	Glu	Asn	Val	Thr	Met	Lys	Val	
				200					205					210	
Val	Ser	Val	Leu	Tyr	Asn	Val	Thr	Ile	Asn	Asn	Thr	Tyr	Ser	Cys	
				215					220					225	
Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val	
				230					235					240	
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn	
				245					250					255	
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp	
				260					265					270	

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
275 280

<210> 61
<211> 1617
<212> DNA
<213> Homo Sapien

<400> 61
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ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200
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aagtctctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
ctcccaatgt ggatcctgag gcctactcct ggttccagtc ggtggactca 400
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 c ctgcagctg ggacccctca cttgcctgcc atgctctgct cggcttcagt 1500
 c tccaggaga cagtggtcac ctctccctgc caatactttt ttttaatttgc 1550
 a ttttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
 aaaggatgaa actctga 1617

<210> 62
 <211> 284
 <212> PRT
 <213> Homo Sapien

<400> 62
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 Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
 20 25 30
 Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
 35 40 45
 Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
 50 55 60
 Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
 65 70 75
 Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr
 80 85 90
 Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu
 95 100 105
 Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr
 110 115 120
 Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser
 125 130 135
 Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser
 140 145 150
 Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys
 155 160 165

Thr	Lys	Ser	Gly	Arg	Ile	Asp	Val	Tyr	Gly	Phe	Ser	Ala	Leu	Trp	
				170					175					180	
Lys	Phe	Ile	Gln	Gln	Trp	Lys	Asn	Leu	Phe	Gln	Gln	Tyr	Asp	Arg	
				185					190					195	
Asp	Arg	Ser	Gly	Ser	Ile	Ser	Tyr	Thr	Glu	Leu	Gln	Gln	Ala	Leu	
				200					205					210	
Ser	Gln	Met	Gly	Tyr	Asn	Leu	Ser	Pro	Gln	Phe	Thr	Gln	Leu	Leu	
				215					220					225	
Val	Ser	Arg	Tyr	Cys	Pro	Arg	Ser	Ala	Asn	Pro	Ala	Met	Gln	Leu	
				230					235					240	
Asp	Arg	Phe	Ile	Gln	Val	Cys	Thr	Gln	Leu	Gln	Val	Leu	Thr	Glu	
				245					250					255	
Ala	Phe	Arg	Glu	Lys	Asp	Thr	Ala	Val	Gln	Gly	Asn	Ile	Arg	Leu	
				260					265					270	
Ser	Phe	Glu	Asp	Phe	Val	Thr	Met	Thr	Ala	Ser	Arg	Met	Leu		
				275					280						

<210> 63
 <211> 1234
 <212> DNA
 <213> Homo Sapien

<400> 63
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 accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250
 ccatcagatg gcttcccacc tgcaggaggt tctgcagtgc agaggtggcc 300
 tccatcgtgg gggtgcctg ccatggattc ctggccccct gaggatcctt 350
 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgtgcct 400
 gaagaactct cttacctctc cagtgtgcg gccctcgtc cgggcagtgg 450
 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500
 cttcactcct ccaccaggac tcggagtcca gacgactgcc ccgttctaata 550
 tcaactggag cgggggaaa aatcctttcc caacgccctc cctgggtctct 600
 catccacagg gttctgcctg atcaccctg gggtagcctg aatcccagt 650
 tgtcctgggg aggtggaggc cctgggactg gttggggaac gaggcccatg 700

ccacaccctg agggaaatctg gggatatcaat aatcaacccc caggtaccag 750
 ctgggggaaat attaatcggg atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg gggaatatta atcgggtatcc aggaggcagc 850
 tggggggaata ttcatctata cccaggtatc aataacccat ttcctcctgg 900
 agttctccgc cctcctgggt cttcttgga catcccagct ggcttcccta 950
 atcctccaag ccctagggtg cagtggggct agagcacgat agagggaaac 1000
 ccaacattgg gagttagagt cctgctcccg ccccttgctg tgtgggctca 1050
 atccaggccc tgtaacatg tttccagcac tatccccact tttcagtgcc 1100
 tccccctgctc atctccaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 64
 Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
 1 5 10 15
 Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45
 Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
 50 55 60
 Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
 65 70 75
 Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
 80 85 90
 Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
 95 100 105
 Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
 110 115 120
 Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
 125 130 135
 Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
 140 145 150

Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu	
				155					160					165	
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg	
				170					175					180	
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro	
				185					190					195	
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly	
				200					205					210	
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr	
				215					220					225	
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly	
				230					235					240	
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg	
				245					250					255	
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	
				260					265					270	
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	
				275					280					285	
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val	
				290					295					300	
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro	
				305					310					315	
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly						
				320					325						

<210> 65
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 65
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 gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
 gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgccctctcc tccatctccc ttcagggacc agcgtcaccc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct tttggggcgg ggatgcagga 350
 ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400

ataaataaaa ttcggtatgc tg 422

<210> 66
<211> 78
<212> PRT
<213> Homo Sapien

<400> 66
Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
1 5 10 15
Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
20 25 30
Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
35 40 45
Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
50 55 60
Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
65 70 75
Cys Asn Thr

<210> 67
<211> 744
<212> DNA
<213> Homo Sapien

<400> 67
acggaccgag ggttcgaggg agggacacgg accaggaacc tgagctaggt 50
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gccaccacgc ccatggcgaa ccccgggctg gggctgcttc tggcgctggg 200
cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250
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agctccgatg gcaacctgcg tccggaagcc atcactgcta tcatcgtgg 350
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tgcggaagct tcgggagaag cggcagacgg agggcaccta ccggcccagt 450
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caaggagacg gtgcagggtt gcctgcccat ctagggtccc tctcctgcat 550
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gggcagtcag atccaccacg tgcttaatat cagggaagaa ggtacttcaa 650

agactctgcc cctgaggtca agagaggatg gggctattca cttttatata 700

tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68
<211> 123
<212> PRT
<213> Homo Sapien

<400> 68
Met Ala Asn Pro Gly Leu Gly Leu Leu Leu Ala Leu Gly Leu Pro
1 5 10 15
Phe Leu Leu Ala Arg Trp Gly Arg Ala Trp Gly Gln Ile Gln Thr
20 25 30
Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
35 40 45
Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
50 55 60
Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
65 70 75
Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
80 85 90
Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala
95 100 105
Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
110 115 120
Leu Pro Ile

<210> 69
<211> 3265
<212> DNA
<213> Homo Sapien

<400> 69
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cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcattaagc 100
tgaataataa tggctttgaa gatattgtca ttgttataga tcctagtgtg 150
ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200
ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250
tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300
ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400
 agaaaggcga atacattcac ttcacccctg accttctact tggaaaaaaa 450
 caaaatgaat atggaccacc aggcaaactg tttgtccatg agtgggctca 500
 cctccggtgg ggagtgtttg atgagtacaa tgaagatcag cctttctacc 550
 gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600
 ggtagaaata gaggttataa gtgtcaagga ggcagctgtc ttagtagagc 650
 atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700
 ttcctgataa agtacaaaca gaaaaagcat ccataatgtt tatgcaaagt 750
 attgattctg ttgttgaatt ttgtaacgaa aaaaccata atcaagaagc 800
 tccaagccta caaaacataa agtgcaattt tagaagtaca tgggaggtga 850
 ttagcaattc tgaggatttt aaaaacacca taccatggg gacaccacct 900
 cctccacctg tcttctcatt gctgaagatc agtcaaagaa ttgtgtgctt 950
 agttcttgat aagtctggaa gcatgggggg taaggaccgc ctaaatacgaa 1000
 tgaatcaagc agcaaaacat ttcctgctgc agactgttga aaatggatcc 1050
 tgggtgggga tggttcactt tgatagtact gccactattg taaataagct 1100
 aatccaaata aaaagcagtg atgaaagaaa cacactcatg gcaggattac 1150
 ctacatatcc tctgggagga acttccatct gctctggaat taaatatgca 1200
 tttcaggtga ttggagagct acattcccaa ctcgatggat ccgaagtact 1250
 gctgctgact gatggggagg ataacactgc aagttcttgt attgatgaag 1300
 tgaaacaaag tggggccatt gttcatttta ttgctttggg aagagctgct 1350
 gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttta 1400
 tgtttcagat gaagctcaga acaatggcct cattgatgct tttggggctc 1450
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 tgccctcccag tatttctctc tgggatccca gtggaacaat aatggaaaat 1650
 ttcacagtgg atgcaacttc caaaatggcc tatctcagta ttccaggaac 1700
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 aaacattaac tattacagta acttctcgag cagcaaattc ttctgtgcct 1800

ccaatcacag tgaatgctaa aatgaataag gacgtaaaca gtttccccag 1850
 cccaatgatt gtttacgcag aaattctaca aggatatgta cctgttcttg 1900
 gagccaatgt gactgctttc attgaatcac agaatggaca tacagaagtt 1950
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 agtctactcc aggtatttta cagcatatac agaaaatggc agatatagct 2050
 taaaagttcg ggctcatgga ggagcaaaca ctgccaggct aaaattacgg 2100
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 caagtcccaa gccttccctt gcctgaccaa taccaccaa gtcaaatac 2300
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 caccaggaga taattttgat gttggaaaag ttcaacgtta tatcataaga 2400
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 ttgcatttaa accagaaaat atctcagaag aaaatgcaac ccacatattt 2550
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 gtaaaggata tttctgaatc ttaaaattca tcccatgtgt gatcataaac 2900
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 tttatttggt attttatttg taagaaatag tgatgaacaa agatcctttt 3050
 tcatactgat acctgggtgt atattatttg atgcaacagt tttctgaaat 3100
 gatatttcaa attgcatcaa gaaattaaaa tcatttatct gagtagtcaa 3150
 aatacaagta aaggagagca aataaacaac atttgaaaaa aaaaaaaaaa 3200

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250

aaaaaaaaaa aaaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met	Gly	Leu	Phe	Arg	Gly	Phe	Val	Phe	Leu	Leu	Val	Leu	Cys	Leu
1				5					10					15

Leu	His	Gln	Ser	Asn	Thr	Ser	Phe	Ile	Lys	Leu	Asn	Asn	Asn	Gly
				20					25					30

Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp
				35					40					45

Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser
				50					55					60

Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn
				65					70					75

Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr
				80					85					90

Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val
				95					100					105

Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln
				110					115					120

Phe	Thr	Glu	Cys	Gly	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro
				125					130					135

Asp	Leu	Leu	Leu	Gly	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly
				140					145					150

Lys	Leu	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe
				155					160					165

Asp	Glu	Tyr	Asn	Glu	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys
				170					175					180

Lys	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn
				185					190					195

Arg	Val	Tyr	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys
				200					205					210

Arg	Ile	Asp	Ser	Thr	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe
				215					220					225

Phe	Pro	Asp	Lys	Val	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met
				230					235					240

Gln Ser Ile Asp	Ser Val Val Glu Phe	Cys Asn Glu Lys Thr His
245	250	255
Asn Gln Glu Ala	Pro Ser Leu Gln Asn	Ile Lys Cys Asn Phe Arg
260	265	270
Ser Thr Trp Glu	Val Ile Ser Asn Ser	Glu Asp Phe Lys Asn Thr
275	280	285
Ile Pro Met Val	Thr Pro Pro Pro Pro	Pro Val Phe Ser Leu Leu
290	295	300
Lys Ile Ser Gln	Arg Ile Val Cys Leu	Val Leu Asp Lys Ser Gly
305	310	315
Ser Met Gly Gly	Lys Asp Arg Leu Asn	Arg Met Asn Gln Ala Ala
320	325	330
Lys His Phe Leu	Leu Gln Thr Val Glu	Asn Gly Ser Trp Val Gly
335	340	345
Met Val His Phe	Asp Ser Thr Ala Thr	Ile Val Asn Lys Leu Ile
350	355	360
Gln Ile Lys Ser	Ser Asp Glu Arg Asn	Thr Leu Met Ala Gly Leu
365	370	375
Pro Thr Tyr Pro	Leu Gly Gly Thr Ser	Ile Cys Ser Gly Ile Lys
380	385	390
Tyr Ala Phe Gln	Val Ile Gly Glu Leu	His Ser Gln Leu Asp Gly
395	400	405
Ser Glu Val Leu	Leu Leu Thr Asp Gly	Glu Asp Asn Thr Ala Ser
410	415	420
Ser Cys Ile Asp	Glu Val Lys Gln Ser	Gly Ala Ile Val His Phe
425	430	435
Ile Ala Leu Gly	Arg Ala Ala Asp Glu	Ala Val Ile Glu Met Ser
440	445	450
Lys Ile Thr Gly	Gly Ser His Phe Tyr	Val Ser Asp Glu Ala Gln
455	460	465
Asn Asn Gly Leu	Ile Asp Ala Phe Gly	Ala Leu Thr Ser Gly Asn
470	475	480
Thr Asp Leu Ser	Gln Lys Ser Leu Gln	Leu Glu Ser Lys Gly Leu
485	490	495
Thr Leu Asn Ser	Asn Ala Trp Met Asn	Asp Thr Val Ile Ile Asp
500	505	510
Ser Thr Val Gly	Lys Asp Thr Phe Phe	Leu Ile Thr Trp Asn Ser
515	520	525

Leu Pro Pro Ser	Ile Ser Leu Trp Asp	Pro Ser Gly Thr Ile Met
530	535	540
Glu Asn Phe Thr	Val Asp Ala Thr Ser	Lys Met Ala Tyr Leu Ser
545	550	555
Ile Pro Gly Thr	Ala Lys Val Gly Thr	Trp Ala Tyr Asn Leu Gln
560	565	570
Ala Lys Ala Asn	Pro Glu Thr Leu Thr	Ile Thr Val Thr Ser Arg
575	580	585
Ala Ala Asn Ser	Ser Val Pro Pro Ile	Thr Val Asn Ala Lys Met
590	595	600
Asn Lys Asp Val	Asn Ser Phe Pro Ser	Pro Met Ile Val Tyr Ala
605	610	615
Glu Ile Leu Gln	Gly Tyr Val Pro Val	Leu Gly Ala Asn Val Thr
620	625	630
Ala Phe Ile Glu	Ser Gln Asn Gly His	Thr Glu Val Leu Glu Leu
635	640	645
Leu Asp Asn Gly	Ala Gly Ala Asp Ser	Phe Lys Asn Asp Gly Val
650	655	660
Tyr Ser Arg Tyr	Phe Thr Ala Tyr Thr	Glu Asn Gly Arg Tyr Ser
665	670	675
Leu Lys Val Arg	Ala His Gly Gly Ala	Asn Thr Ala Arg Leu Lys
680	685	690
Leu Arg Pro Pro	Leu Asn Arg Ala Ala	Tyr Ile Pro Gly Trp Val
695	700	705
Val Asn Gly Glu	Ile Glu Ala Asn Pro	Pro Arg Pro Glu Ile Asp
710	715	720
Glu Asp Thr Gln	Thr Thr Leu Glu Asp	Phe Ser Arg Thr Ala Ser
725	730	735
Gly Gly Ala Phe	Val Val Ser Gln Val	Pro Ser Leu Pro Leu Pro
740	745	750
Asp Gln Tyr Pro	Pro Ser Gln Ile Thr	Asp Leu Asp Ala Thr Val
755	760	765
His Glu Asp Lys	Ile Ile Leu Thr Trp	Thr Ala Pro Gly Asp Asn
770	775	780
Phe Asp Val Gly	Lys Val Gln Arg Tyr	Ile Ile Arg Ile Ser Ala
785	790	795
Ser Ile Leu Asp	Leu Arg Asp Ser Phe	Asp Asp Ala Leu Gln Val
800	805	810

Asn Thr Thr Asp	Leu Ser Pro Lys Glu Ala Asn Ser Lys Glu Ser	815	820	825
Phe Ala Phe Lys	Pro Glu Asn Ile Ser Glu Glu Asn Ala Thr His	830	835	840
Ile Phe Ile Ala	Ile Lys Ser Ile Asp Lys Ser Asn Leu Thr Ser	845	850	855
Lys Val Ser Asn	Ile Ala Gln Val Thr Leu Phe Ile Pro Gln Ala	860	865	870
Asn Pro Asp Asp	Ile Asp Pro Thr Pro Thr Pro Thr Pro Thr Pro	875	880	885
Thr Pro Asp Lys	Ser His Asn Ser Gly Val Asn Ile Ser Thr Leu	890	895	900
Val Leu Ser Val	Ile Gly Ser Val Val Ile Val Asn Phe Ile Leu	905	910	915
Ser Thr Thr Ile				

<210> 71
 <211> 3877
 <212> DNA
 <213> Homo Sapien

<400> 71
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 aagaccatac gtccccgggc aggggtgaca acaggtgtca tctttttgat 100
 ctcggtgtgtg gctgccttcc tatttcaagg aaagacgcca aggtaatttt 150
 gaccagagg agcaatgatg tagccacctc ctaaccttcc cttcttgaac 200
 cccagttat gccaggattt actagagagt gtcaactcaa ccagcaagcg 250
 gtccttcgg cttaacttgt ggttgaggga gagaaccttt gtggggctgc 300
 gttctcttag cagtgtcag aagtgacttg cctgaggggtg gaccagaaga 350
 aaggaaaggt cccctcttgc tgttggtgc acatcaggaa ggctgtgatg 400
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 cttccaaagc tgccaacttc aggaacttta cttcatcca gctgaatgga 1650
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 agaattggac tgatgggtca gagatgagaa agcctccgat ttctctctgt 2400
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<210> 72

<211> 532

<212> PRT

<213> Homo Sapien

<400> 72

Met	Met	Met	Val	Arg	Arg	Gly	Leu	Leu	Ala	Trp	Ile	Ser	Arg	Val					
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Val	Val	Leu	Leu	Val	Leu	Leu	Cys	Cys	Ala	Ile	Ser	Val	Leu	Tyr					
				20					25					30					
Met	Leu	Ala	Cys	Thr	Pro	Lys	Gly	Asp	Glu	Glu	Gln	Leu	Ala	Leu					
				35					40					45					
Pro	Arg	Ala	Asn	Ser	Pro	Thr	Gly	Lys	Glu	Gly	Tyr	Gln	Ala	Val					
				50					55					60					
Leu	Gln	Glu	Trp	Glu	Glu	Gln	His	Arg	Asn	Tyr	Val	Ser	Ser	Leu					
				65					70					75					
Lys	Arg	Gln	Ile	Ala	Gln	Leu	Lys	Glu	Glu	Leu	Gln	Glu	Arg	Ser					
				80					85					90					
Glu	Gln	Leu	Arg	Asn	Gly	Gln	Tyr	Gln	Ala	Ser	Asp	Ala	Ala	Gly					
				95					100					105					
Leu	Gly	Leu	Asp	Arg	Ser	Pro	Pro	Glu	Lys	Thr	Gln	Ala	Asp	Leu					
				110					115					120					
Leu	Ala	Phe	Leu	His	Ser	Gln	Val	Asp	Lys	Ala	Glu	Val	Asn	Ala					
				125					130					135					
Gly	Val	Lys	Leu	Ala	Thr	Glu	Tyr	Ala	Ala	Val	Pro	Phe	Asp	Ser					
				140					145					150					
Phe	Thr	Leu	Gln	Lys	Val	Tyr	Gln	Leu	Glu	Thr	Gly	Leu	Thr	Arg					
				155					160					165					
His	Pro	Glu	Glu	Lys	Pro	Val	Arg	Lys	Asp	Lys	Arg	Asp	Glu	Leu					
				170					175					180					
Val	Glu	Ala	Ile	Glu	Ser	Ala	Leu	Glu	Thr	Leu	Asn	Asn	Pro	Ala					

				185						190					195
Glu	Asn	Ser	Pro	Asn	His	Arg	Pro	Tyr	Thr	Ala	Ser	Asp	Phe	Ile	
				200					205					210	
Glu	Gly	Ile	Tyr	Arg	Thr	Glu	Arg	Asp	Lys	Gly	Thr	Leu	Tyr	Glu	
				215					220					225	
Leu	Thr	Phe	Lys	Gly	Asp	His	Lys	His	Glu	Phe	Lys	Arg	Leu	Ile	
				230					235					240	
Leu	Phe	Arg	Pro	Phe	Ser	Pro	Ile	Met	Lys	Val	Lys	Asn	Glu	Lys	
				245					250					255	
Leu	Asn	Met	Ala	Asn	Thr	Leu	Ile	Asn	Val	Ile	Val	Pro	Leu	Ala	
				260					265					270	
Lys	Arg	Val	Asp	Lys	Phe	Arg	Gln	Phe	Met	Gln	Asn	Phe	Arg	Glu	
				275					280					285	
Met	Cys	Ile	Glu	Gln	Asp	Gly	Arg	Val	His	Leu	Thr	Val	Val	Tyr	
				290					295					300	
Phe	Gly	Lys	Glu	Glu	Ile	Asn	Glu	Val	Lys	Gly	Ile	Leu	Glu	Asn	
				305					310					315	
Thr	Ser	Lys	Ala	Ala	Asn	Phe	Arg	Asn	Phe	Thr	Phe	Ile	Gln	Leu	
				320					325					330	
Asn	Gly	Glu	Phe	Ser	Arg	Gly	Lys	Gly	Leu	Asp	Val	Gly	Ala	Arg	
				335					340					345	
Phe	Trp	Lys	Gly	Ser	Asn	Val	Leu	Leu	Phe	Phe	Cys	Asp	Val	Asp	
				350					355					360	
Ile	Tyr	Phe	Thr	Ser	Glu	Phe	Leu	Asn	Thr	Cys	Arg	Leu	Asn	Thr	
				365					370					375	
Gln	Pro	Gly	Lys	Lys	Val	Phe	Tyr	Pro	Val	Leu	Phe	Ser	Gln	Tyr	
				380					385					390	
Asn	Pro	Gly	Ile	Ile	Tyr	Gly	His	His	Asp	Ala	Val	Pro	Pro	Leu	
				395					400					405	
Glu	Gln	Gln	Leu	Val	Ile	Lys	Lys	Glu	Thr	Gly	Phe	Trp	Arg	Asp	
				410					415					420	
Phe	Gly	Phe	Gly	Met	Thr	Cys	Gln	Tyr	Arg	Ser	Asp	Phe	Ile	Asn	
				425					430					435	
Ile	Gly	Gly	Phe	Asp	Leu	Asp	Ile	Lys	Gly	Trp	Gly	Gly	Glu	Asp	
				440					445					450	
Val	His	Leu	Tyr	Arg	Lys	Tyr	Leu	His	Ser	Asn	Leu	Ile	Val	Val	
				455					460					465	
Arg	Thr	Pro	Val	Arg	Gly	Leu	Phe	His	Leu	Trp	His	Glu	Lys	Arg	

470	475	480
Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln		
485	490	495
Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu		
500	505	510
Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln		
515	520	525
Lys Thr Ser Ser Lys Lys Thr		
530		

<210> 73
 <211> 1701
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> unsure
 <222> 1528
 <223> unknown base

<400> 73
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 tggaagccca cagagacaga gacagcaaga gaagcagaga taaatacact 150
 cacgccagga gctcgtctgc tctctctctc tctctctcac tcttccctcc 200
 ctctctctct gctgtctcta gtcctctagt cctcaaattc ccagtcccct 250
 gcaccccttc ctgggacact atgttggtct ccgccctcct gctggagggtg 300
 atttggatcc tggctgcaga tgggggtcaa cactggacgt atgagggccc 350
 acatgggtcag gaccattggc cagcctctta ccctgagtgt ggaaacaatg 400
 cccagtgcgc catcgatatt cagacagaca gtgtgacatt tgaccctgat 450
 ttgcctgctc tgcagcccca cggatatgac cagcctggca ccgagccttt 500
 ggacctgcac aacaatggcc acacagtgc aactctctctg ccctctaccc 550
 tgtatctggg tggacttccc cgaaaatatg tagctgcca gctccacctg 600
 cactgggggtc agaaaggatc cccagggggg tcagaacacc agatcaacag 650
 tgaagccaca tttgcagagc tccacattgt acattatgac tctgattcct 700
 atgacagctt gagtgaggct gctgagaggc ctcagggcct ggctgtcctg 750
 ggcatacctaa ttgaggtggg tgagactaag aatatagctt atgaacacat 800
 tctgagtcac ttgcatgaag tcaggcataa agatcagaag acctcagtgc 850

ctcccttcaa cctaagagag ctgctcccca aacagctggg gcagtacttc 900
 cgctacaatg gctcgctcac aactccccct tgctaccaga gtgtgctctg 950
 gacagttttt tatagaaggt cccagatttc aatggaacag ctggaaaagc 1000
 ttcaggggac attgttctcc acagaagagg agccctctaa gcttctggta 1050
 cagaactacc gagcccttca gcctctcaat cagcgcatgg tctttgcttc 1100
 tttcatccaa gcaggatcct cgtataccac aggtgaaatg ctgagtctag 1150
 gtgtaggaat cttgggtggc tgtctctgcc ttctcctggc tgtttatttc 1200
 attgctagaa agattcggaa gaagaggctg gaaaaccgaa agagtgtggt 1250
 cttcacctca gcacaagcca cgactgaggc ataaattcct tctcagatac 1300
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 ccttccccctg gacatctctt agagaggaat ggaccaggc tgtcattcca 1450
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 gaaatcgctg tgttgttaat gcagaganca aactctgttt agttgcaggg 1550
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 tttccctaga tatactgcgg gatctctcct taggataaag agttgctgtt 1650
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 t 1701

<210> 74
 <211> 337
 <212> PRT
 <213> Homo Sapien

<400> 74
 Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala
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 Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
 20 25 30
 Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
 35 40 45
 Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
 50 55 60
 Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
 65 70 75

Pro	Leu	Asp	Leu	His	Asn	Asn	Gly	His	Thr	Val	Gln	Leu	Ser	Leu		80	85	90
Pro	Ser	Thr	Leu	Tyr	Leu	Gly	Gly	Leu	Pro	Arg	Lys	Tyr	Val	Ala		95	100	105
Ala	Gln	Leu	His	Leu	His	Trp	Gly	Gln	Lys	Gly	Ser	Pro	Gly	Gly		110	115	120
Ser	Glu	His	Gln	Ile	Asn	Ser	Glu	Ala	Thr	Phe	Ala	Glu	Leu	His		125	130	135
Ile	Val	His	Tyr	Asp	Ser	Asp	Ser	Tyr	Asp	Ser	Leu	Ser	Glu	Ala		140	145	150
Ala	Glu	Arg	Pro	Gln	Gly	Leu	Ala	Val	Leu	Gly	Ile	Leu	Ile	Glu		155	160	165
Val	Gly	Glu	Thr	Lys	Asn	Ile	Ala	Tyr	Glu	His	Ile	Leu	Ser	His		170	175	180
Leu	His	Glu	Val	Arg	His	Lys	Asp	Gln	Lys	Thr	Ser	Val	Pro	Pro		185	190	195
Phe	Asn	Leu	Arg	Glu	Leu	Leu	Pro	Lys	Gln	Leu	Gly	Gln	Tyr	Phe		200	205	210
Arg	Tyr	Asn	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	Tyr	Gln	Ser	Val		215	220	225
Leu	Trp	Thr	Val	Phe	Tyr	Arg	Arg	Ser	Gln	Ile	Ser	Met	Glu	Gln		230	235	240
Leu	Glu	Lys	Leu	Gln	Gly	Thr	Leu	Phe	Ser	Thr	Glu	Glu	Glu	Pro		245	250	255
Ser	Lys	Leu	Leu	Val	Gln	Asn	Tyr	Arg	Ala	Leu	Gln	Pro	Leu	Asn		260	265	270
Gln	Arg	Met	Val	Phe	Ala	Ser	Phe	Ile	Gln	Ala	Gly	Ser	Ser	Tyr		275	280	285
Thr	Thr	Gly	Glu	Met	Leu	Ser	Leu	Gly	Val	Gly	Ile	Leu	Val	Gly		290	295	300
Cys	Leu	Cys	Leu	Leu	Leu	Ala	Val	Tyr	Phe	Ile	Ala	Arg	Lys	Ile		305	310	315
Arg	Lys	Lys	Arg	Leu	Glu	Asn	Arg	Lys	Ser	Val	Val	Phe	Thr	Ser		320	325	330
Ala	Gln	Ala	Thr	Thr	Glu	Ala										335		

<210> 75
 <211> 1743
 <212> DNA

<213> Homo Sapien

<400> 75

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cccaccagag gtggcactga ctacagatga gaagtccatt tctgttgctc 250
tgacagctcc agagaagtgg aagagaaatc cagaagacct tctgttttcc 300
atgcaacaaa tatactccaa tctgaagtat aacgtgtctg tgttgaatac 350
taaatacaaac agaacgtggg ccagtggtgt gaccaaccac acgctgggtgc 400
tcacctgggt ggagccgaac actctttact gcgtacacgt ggagtccttc 450
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atgttttgcc catatctatt accgtgtttc ttttttctgt gatgggctat 600
tccatctacc gatatatcca cgttggcaaa gagaaacacc cagcaaattt 650
gattttgatt tatggaaatg aatttgacaa aagattcttt gtgcctgctg 700
aaaaaatcgt gattaacttt atcacccctca atatctcgga tgattctaaa 750
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aatgtttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76
<211> 442
<212> PRT
<213> Homo Sapien

<400> 76
Met Ser Tyr Asn Gly Leu His Gln Arg Val Phe Lys Glu Leu Lys
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Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu
20 25 30
Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr
35 40 45
Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
50 55 60
Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
65 70 75
Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
80 85 90
Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val
95 100 105
His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro
110 115 120
Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu
125 130 135
Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile
140 145 150
Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr
155 160 165
Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile Leu Ile
170 175 180

Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys	185	190	195
Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys	200	205	210
Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val	215	220	225
Ser Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Arg Pro Pro	230	235	240
Gln Glu Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu	245	250	255
Met Glu Ile Phe Cys Asp Ser Glu Glu Asn Thr Glu Gly Thr Ser	260	265	270
Leu Thr Gln Gln Glu Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys	275	280	285
Thr Val Ile Glu Tyr Glu Tyr Asp Val Arg Thr Thr Asp Ile Cys	290	295	300
Ala Gly Pro Glu Glu Gln Glu Leu Ser Leu Gln Glu Glu Val Ser	305	310	315
Thr Gln Gly Thr Leu Leu Glu Ser Gln Ala Ala Leu Ala Val Leu	320	325	330
Gly Pro Gln Thr Leu Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp	335	340	345
Leu Asp Pro Leu Ala Gln Glu His Thr Asp Ser Glu Glu Gly Pro	350	355	360
Glu Glu Glu Pro Ser Thr Thr Leu Val Asp Trp Asp Pro Gln Thr	365	370	375
Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser	380	385	390
Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly	395	400	405
Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro	410	415	420
Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly	425	430	435
Leu Tyr Val Gln Met Glu Asn	440		

<210> 77
 <211> 1636
 <212> DNA

<213> Homo Sapien

<400> 77

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ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150
tgcagtttct atcctcggcc caaaagtcat caaagaaaag ctgacacagg 200
agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250
agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300
ggtgaacacc gtctgaagc acatcatctg gctgaaggtc atcacagcta 350
acatcctcca gctgcagggtg aagccctcgg ccaatgacca ggagctgcta 400
gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctgggtcaa 450
gaccatcgtg gagttccaca tgacgactga ggcccaagcc accatccgca 500
tggaacaccag tgcaagtggc cccaccgcc tggctctcag tgactgtgcc 550
accagccatg ggagcctgcg catccaactg ctgtataagc tctccttct 600
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gaaacccagc tctcctgtct cccagtgaag acttgggatgg cagccatcag 1550
ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600
cctctctgca atcaataaac acttgccctgt gaaaaa 1636

<210> 78
<211> 484
<212> PRT
<213> Homo Sapien

<400> 78
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Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
20 25 30
Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
35 40 45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
50 55 60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
65 70 75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
80 85 90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
95 100 105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
110 115 120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
125 130 135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
140 145 150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
155 160 165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly

200										205					210				
Met	Tyr	Ala	Asp	Leu	Leu	Gln	Leu	Val	Lys	Val	Pro	Ile	Ser	Leu					
				215					220					225					
Ser	Ile	Asp	Arg	Leu	Glu	Phe	Asp	Leu	Leu	Tyr	Pro	Ala	Ile	Lys					
				230					235					240					
Gly	Asp	Thr	Ile	Gln	Leu	Tyr	Leu	Gly	Ala	Lys	Leu	Leu	Asp	Ser					
				245					250					255					
Gln	Gly	Lys	Val	Thr	Lys	Trp	Phe	Asn	Asn	Ser	Ala	Ala	Ser	Leu					
				260					265					270					
Thr	Met	Pro	Thr	Leu	Asp	Asn	Ile	Pro	Phe	Ser	Leu	Ile	Val	Ser					
				275					280					285					
Gln	Asp	Val	Val	Lys	Ala	Ala	Val	Ala	Ala	Val	Leu	Ser	Pro	Glu					
				290					295					300					
Glu	Phe	Met	Val	Leu	Leu	Asp	Ser	Val	Leu	Pro	Glu	Ser	Ala	His					
				305					310					315					
Arg	Leu	Lys	Ser	Ser	Ile	Gly	Leu	Ile	Asn	Glu	Lys	Ala	Ala	Asp					
				320					325					330					
Lys	Leu	Gly	Ser	Thr	Gln	Ile	Val	Lys	Ile	Leu	Thr	Gln	Asp	Thr					
				335					340					345					
Pro	Glu	Phe	Phe	Ile	Asp	Gln	Gly	His	Ala	Lys	Val	Ala	Gln	Leu					
				350					355					360					
Ile	Val	Leu	Glu	Val	Phe	Pro	Ser	Ser	Glu	Ala	Leu	Arg	Pro	Leu					
				365					370					375					
Phe	Thr	Leu	Gly	Ile	Glu	Ala	Ser	Ser	Glu	Ala	Gln	Phe	Tyr	Thr					
				380					385					390					
Lys	Gly	Asp	Gln	Leu	Ile	Leu	Asn	Leu	Asn	Asn	Ile	Ser	Ser	Asp					
				395					400					405					
Arg	Ile	Gln	Leu	Met	Asn	Ser	Gly	Ile	Gly	Trp	Phe	Gln	Pro	Asp					
				410					415					420					
Val	Leu	Lys	Asn	Ile	Ile	Thr	Glu	Ile	Ile	His	Ser	Ile	Leu	Leu					
				425					430					435					
Pro	Asn	Gln	Asn	Gly	Lys	Leu	Arg	Ser	Gly	Val	Pro	Val	Ser	Leu					
				440					445					450					
Val	Lys	Ala	Leu	Gly	Phe	Glu	Ala	Ala	Glu	Ser	Ser	Leu	Thr	Lys					
				455					460					465					
Asp	Ala	Leu	Val	Leu	Thr	Pro	Ala	Ser	Leu	Trp	Lys	Pro	Ser	Ser					
				470					475					480					
Pro	Val	Ser	Gln																

<210> 79
 <211> 1475
 <212> DNA
 <213> Homo Sapien

<400> 79
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 gcttctactg agaggtctgc catggcctct cttggcctcc aacttgtggg 150
 ctacatccta ggccttcttg ggcttttggg cacactggtt gccatgctgc 200
 tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250
 gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
 catcaccag tgtgacatct atagcaccct tctgggcctg ccgctgaca 350
 tccaggctgc ccaggccatg atggtgacat ccagtgcaat ctctccctg 400
 gcctgcatta tctctgtggt gggcatgaga tgcacagtct tctgccagga 450
 atcccagacc aaagacagag tggcggtagc aggtggagtc tttttcatcc 500
 ttggaggcct cctgggatcc attcctgttg cctggaatct tcatgggatc 550
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 ctggaatcat cctctgcttt tccctgctcat ccagagaaa tcgctccaac 700
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 gcctggtcaa cctcccaaag tcaagagtga gttcaattcc tacagcctga 800
 cagggatatgt gtgaagaacc agggggcaga gctggggggg ggctgggtct 850
 gtgaaaaaca gtggacagca ccccgagggc cacaggtgag ggacactacc 900
 actggatcgt gtcagaagg gctgctgagg atagactgac tttggccatt 950
 ggattgagca aaggcagaaa tgggggctag tgtaacagca tgcaggttga 1000
 attgccaagg atgctcgcca tgccagcctt tctgttttcc tcaccttgct 1050
 gctcccctgc cctaagtccc caaccctcaa cttgaaacct cattccctta 1100
 agccaggact cagaggatcc ctttgccctc tggtttacct gggactccat 1150
 ccccaaacc actaatcaca tccactgac tgaccctctg tgatcaaaga 1200
 ccctctctct ggctgaggtt ggctcttagc tcattgctgg ggatgggaag 1250

gagaagcagt ggcttttgtg ggcattgctc taacctactt ctcaagcttc 1300
cctccaaaga aactgattgg ccttgggaacc tccatccac tcttggtatg 1350
actccacagt gtccagacta atttgtgcat gaactgaaat aaaaccatcc 1400
tacggtatcc agggaacaga aagcaggatg caggatggga ggacaggaag 1450
gcagcctggg acatttaaaa aaata 1475

<210> 80
<211> 230
<212> PRT
<213> Homo Sapien

<400> 80
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Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp
20 25 30
Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
35 40 45
Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
50 55 60
Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
65 70 75
Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
80 85 90
Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
95 100 105
Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
110 115 120
Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
125 130 135
Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
140 145 150
Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
155 160 165
Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
170 175 180
Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
185 190 195
Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
 215 220 225

Leu Thr Gly Tyr Val
 230

<210> 81
 <211> 1732
 <212> DNA
 <213> Homo Sapien

<400> 81
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 cttagacctc ccttccctgcc ctcccttccct gccaccgct gcttccctggc 150
 ccttctccga ccccgctcta gcagcagacc tcctggggtc tgtgggttga 200
 tctgtggccc ctgtgcctcc gtgtccctttt cgtctccctt cctcccgaact 250
 ccgctcccgg accagcggcc tgaccctggg gaaaggatgg ttcccagagt 300
 gagggtcctc tcctcccttgc tgggactcgc gctgctctgg ttccccctgg 350
 actcccacgc tcgagcccgc ccagacatgt tctgcctttt ccatgggaag 400
 agatactccc ccggcgagag ctggcacccc tacttggagc cacaaggcct 450
 gatgtactgc ctgcgctgta cctgctcaga gggcgcccat gtgagttgtt 500
 accgcctcca ctgtccgcct gtccactgcc cccagcctgt gacggagcca 550
 cagcaatgct gtcccaagtg tgtggaacct cacactccct ctggactccg 600
 ggccccacca aagtccctgcc agcacaacgg gacctgtac caacacggag 650
 agatcttcag tgcccatgag ctgttccctt cccgcctgcc caaccagtgt 700
 gtccctctgca gctgcacaga gggccagatc tactgcggcc tcacaacctg 750
 ccccgaaacca ggctgcccag caccctctcc actgccagac tcctgctgcc 800
 aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
 cagtcgctcc atggggtgag acatcctcag gatccatgtt ccagtgatgc 900
 tgggagaaaag agaggcccg gacccccagc cccactggc ctgagcgccc 950
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tgccagcgtg tgacctgtcc caccgagtac ccctgccgtc accccgagaa 1200
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 gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300
 ctcgccaca catcggtatc cccaagccca gacaacctgc gtcgctttgc 1350
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 ccacacagcc agaattcttc acttgactca gatcaagaaa gtcaggaagc 1500
 aagacttcca gaaagaggca cagcatttcc gactgctcgc tggccccac 1550
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 ggccagtcca gacaaagtga ccaagacata acaaagacct aacagttgca 1650
 gatatgagct gtataattgt tgttattata tattaataaa taagaagttg 1700
 cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 82
 <211> 451
 <212> PRT
 <213> Homo Sapien

<400> 82
 Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
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 Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
 35 40 45
 Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
 50 55 60
 Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
 65 70 75
 Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
 80 85 90
 Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
 95 100 105
 Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 110 115 120
 Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
 125 130 135

Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys		140	145	150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro		155	160	165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu		170	175	180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg		185	190	195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly		200	205	210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe		215	220	225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val		230	235	240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly		245	250	255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg		260	265	270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly		275	280	285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys		290	295	300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro		305	310	315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg		320	325	330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser		335	340	345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala		350	355	360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu		365	370	375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His		380	385	390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala		395	400	405
Arg	Leu	Pro	Glu	Arg	Gly	Thr	Ala	Leu	Pro	Thr	Ala	Arg	Trp	Pro		410	415	420

Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala
425 430 435

Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys
440 445 450

Thr

<210> 83
<211> 2052
<212> DNA
<213> Homo Sapien

<400> 83
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gttctcctct tctctctaatt ccattcgtca cctctcctgt catccgtttc 150
catgccgtga ggtccattca cagaacacat ccattggctct catgctcagt 200
ttggtttctga gtctcctcaa gctgggatca gggcagtggc aggtgttttg 250
gccagacaag cctgtccagg ccttgggtggg ggaggacgca gcattctcct 300
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gccatttatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450
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 aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctgagaa 1150
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 aacattactg ggaggtggac ggaggacaca ataaaaggtg gcgcgtggga 1250
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 cgatcatggg tactgggtcc tcagactgaa tggagaacat ttgtatttca 1350
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 acagagtgta tcctaattgg ttgttcatta tattacactt tcagtaaaaa 2050
 aa 2052

<210> 84
 <211> 500
 <212> PRT
 <213> Homo Sapien

<400> 84
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 Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
 20 25 30
 Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
 35 40 45
 Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe

				50					55					60	
Ser	Ser	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Lys	Asp	Gln	Pro	Phe	
				65					70					75	
Met	Gln	Met	Pro	Gln	Tyr	Gln	Gly	Arg	Thr	Lys	Leu	Val	Lys	Asp	
				80					85					90	
Ser	Ile	Ala	Glu	Gly	Arg	Ile	Ser	Leu	Arg	Leu	Glu	Asn	Ile	Thr	
				95					100					105	
Val	Leu	Asp	Ala	Gly	Leu	Tyr	Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser	
				110					115					120	
Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	Leu	Gln	Val	Ser	Ala	Leu	Gly	
				125					130					135	
Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	Tyr	Val	Asp	Arg	Asp	Ile	
				140					145					150	
Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	Pro	Arg	Pro	Thr	Ala	
				155					160					165	
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Thr	Asp	Ser	Arg	
				170					175					180	
Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	Ile	Ser	Leu	
				185					190					195	
Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	Arg	His	
				200					205					210	
Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	Asp	
				215					220					225	
Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu	
				230					235					240	
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys	
				245					250					255	
Ile	Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp	
				260					265					270	
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys	
				275					280					285	
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys	
				290					295					300	
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro	
				305					310					315	
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val	
				320					325					330	
Val	Ala	Ser	Gln	Ser	Phe	Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val	

335	340	345
Asp Gly Gly His Asn Lys Arg Trp Arg	Val Gly Val Cys Arg Asp	
350	355	360
Asp Val Asp Arg Arg Lys Glu Tyr Val	Thr Leu Ser Pro Asp His	
365	370	375
Gly Tyr Trp Val Leu Arg Leu Asn Gly	Glu His Leu Tyr Phe Thr	
380	385	390
Leu Asn Pro Arg Phe Ile Ser Val Phe	Pro Arg Thr Pro Pro Thr	
395	400	405
Lys Ile Gly Val Phe Leu Asp Tyr Glu	Cys Gly Thr Ile Ser Phe	
410	415	420
Phe Asn Ile Asn Asp Gln Ser Leu Ile	Tyr Thr Leu Thr Cys Arg	
425	430	435
Phe Glu Gly Leu Leu Arg Pro Tyr Ile	Glu Tyr Pro Ser Tyr Asn	
440	445	450
Glu Gln Asn Gly Thr Pro Ile Val Ile	Cys Pro Val Thr Gln Glu	
455	460	465
Ser Glu Lys Glu Ala Ser Trp Gln Arg	Ala Ser Ala Ile Pro Glu	
470	475	480
Thr Ser Asn Ser Glu Ser Ser Ser Gln	Ala Thr Thr Pro Phe Leu	
485	490	495
Pro Arg Gly Glu Met		
500		

<210> 85
 <211> 1665
 <212> DNA
 <213> Homo Sapien

<400> 85
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 gtaaactgct gacgatgcag agttccgtga cgggtgcagga aggctgtgt 150
 gtccatgtgc cctgctcctt ctctacccc tcgcatggct ggatttacct 200
 tggcccagta gttcatggct actggttccg ggaaggggccc aatacagacc 250
 aggatgctcc agtggccaca aacaaccag ctcgggcagt gtgggaggag 300
 actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350
 cctgagcatc agagatgcca gaagaagtga tgcggggaga tacttctttc 400

gtatggagaa aggaagtata aaatggaatt ataaacatca ccggctctct 450
 gtgaatgtga cagccttgac ccacagggccc aacatcctca tcccaggcac 500
 cctggagtcc ggctgcccc agaatctgac ctgctctgtg ccctgggect 550
 gtgagcaggg gacaccccct atgatctcct ggatagggac ctccgtgtcc 600
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 ccagcgtgac cacgaacaag accgtccatc tcaacgtgtc ctacccgect 750
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 cttgggaaat ggctcatctc tgtcactccc agaggggccag tctctgcgcc 850
 tggctctgtc agttgatgca gttgacagca atccccctgc caggctgagc 900
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 accctgattg agggatcaca gccctccag gcaagggaga agtcagaggc 1500
 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataacact 1550
 atgaattatg tgcagagtga aaagcacaca ggcttttagag tcaaagtatc 1600
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 acagacaaat tccta 1665

<210> 86
 <211> 463
 <212> PRT
 <213> Homo Sapien

<400> 86

Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Trp	Gly	Arg	Glu	Arg	Ala	1	5	10	15
Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr	20	25	30	
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr	35	40	45	
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr	50	55	60	
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala	65	70	75	
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg	80	85	90	
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser	95	100	105	
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg	110	115	120	
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu	125	130	135	
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile	140	145	150	
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser	155	160	165	
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp	170	175	180	
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser	185	190	195	
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser	200	205	210	
Leu	Thr	Cys	Gln	Val	Thr	Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr	Asn	215	220	225	
Lys	Thr	Val	His	Leu	Asn	Val	Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr	230	235	240	
Met	Thr	Val	Phe	Gln	Gly	Asp	Gly	Thr	Val	Ser	Thr	Val	Leu	Gly	245	250	255	
Asn	Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Gly	Gln	Ser	Leu	Arg	Leu	260	265	270	
Val	Cys	Ala	Val	Asp	Ala	Val	Asp	Ser	Asn	Pro	Pro	Ala	Arg	Leu	275	280	285	

Ser	Leu	Ser	Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro	Ser	Gln	Pro	Ser	
				290					295					300	
Asn	Pro	Gly	Val	Leu	Glu	Leu	Pro	Trp	Val	His	Leu	Arg	Asp	Ala	
				305					310					315	
Ala	Glu	Phe	Thr	Cys	Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser	Gln	Gln	
				320					325					330	
Val	Tyr	Leu	Asn	Val	Ser	Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly	Val	
				335					340					345	
Thr	Gln	Gly	Val	Val	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe	
				350					355					360	
Leu	Ser	Phe	Cys	Val	Ile	Phe	Val	Val	Val	Arg	Ser	Cys	Arg	Lys	
				365					370					375	
Lys	Ser	Ala	Arg	Pro	Ala	Ala	Gly	Val	Gly	Asp	Thr	Gly	Ile	Glu	
				380					385					390	
Asp	Ala	Asn	Ala	Val	Arg	Gly	Ser	Ala	Ser	Gln	Gly	Pro	Leu	Thr	
				395					400					405	
Glu	Pro	Trp	Ala	Glu	Asp	Ser	Pro	Pro	Asp	Gln	Pro	Pro	Pro	Ala	
				410					415					420	
Ser	Ala	Arg	Ser	Ser	Val	Gly	Glu	Gly	Glu	Leu	Gln	Tyr	Ala	Ser	
				425					430					435	
Leu	Ser	Phe	Gln	Met	Val	Lys	Pro	Trp	Asp	Ser	Arg	Gly	Gln	Glu	
				440					445					450	
Ala	Thr	Asp	Thr	Glu	Tyr	Ser	Glu	Ile	Lys	Ile	His	Arg			
				455					460						

<210> 87
 <211> 1176
 <212> DNA
 <213> Homo Sapien

<400> 87
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 tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
 gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250
 gtgcatttga tggcctgtat tttctccgca ctgagaatgg tggtatctac 300
 cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctgggtggc 350
 cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400

ggtccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
 tgggccaaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500
 ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
 ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600
 ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
 gtttggcatc taccagaaat atccagtga atatggagaa ggaaagtgtt 700
 ggactgacaa cggcccgggtg atccctgtgg tctatgattt tggcgacgcc 750
 cagaaaacag catcttatta ctcacctat ggccagcggg aattcactgc 800
 gggatttggt cagttcaggg tatttaataa cgagagagca gccaacgcct 850
 tgtgtgctgg aatgaggggc accggatgta aactgagca tcaactgcatt 900
 ggtggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950
 ttctggtttt gattggagtg gatatggaac tcatgttggt tacagcagca 1000
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctcctccca accatgagat cccaaggatg 1100
 gagaacaact taccagtag ctagaatgtt aatggcagaa gagaaaacaa 1150
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 88
 Met Asn Gln Leu Ser Phe Leu Leu Phe Leu Ile Ala Thr Thr Arg
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 Gly Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr
 20 25 30
 Cys Ser Ser Ser Pro Ser Leu Pro Arg Ser Cys Lys Glu Ile Lys
 35 40 45
 Asp Glu Cys Pro Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr
 50 55 60
 Glu Asn Gly Val Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly
 65 70 75
 Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn Asp Met
 80 85 90

Arg Gly Lys Cys Thr Val Gly Asp Arg Trp Ser Ser Gln Gln Gly	95	100	105
Ser Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr	110	115	120
Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp Asp Tyr Lys	125	130	135
Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly Ile Trp	140	145	150
His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser Ser	155	160	165
Leu Leu Arg Tyr Arg Thr Asp Thr Gly Phe Leu Gln Thr Leu Gly	170	175	180
His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Gly	185	190	195
Glu Gly Lys Cys Trp Thr Asp Asn Gly Pro Val Ile Pro Val Val	200	205	210
Tyr Asp Phe Gly Asp Ala Gln Lys Thr Ala Ser Tyr Tyr Ser Pro	215	220	225
Tyr Gly Gln Arg Glu Phe Thr Ala Gly Phe Val Gln Phe Arg Val	230	235	240
Phe Asn Asn Glu Arg Ala Ala Asn Ala Leu Cys Ala Gly Met Arg	245	250	255
Val Thr Gly Cys Asn Thr Glu His His Cys Ile Gly Gly Gly Gly	260	265	270
Tyr Phe Pro Glu Ala Ser Pro Gln Gln Cys Gly Asp Phe Ser Gly	275	280	285
Phe Asp Trp Ser Gly Tyr Gly Thr His Val Gly Tyr Ser Ser Ser	290	295	300
Arg Glu Ile Thr Glu Ala Ala Val Leu Leu Phe Tyr Arg	305	310	

<210> 89
 <211> 759
 <212> DNA
 <213> Homo Sapien

<400> 89
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 tccagcctca gagaccgccg cccttgctcc cgagggccat gggccgggtc 100
 tcagggcttg tgccctctcg ctctctgacg ctctggcgc atctggtggt 150

cgtcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200
 ctctcacgtt ccccccgag gagtatgaca agcaggacat tcagctggtg 250
 gccgcgctct ctgtcacctt gggcctcttt gcagtggagc tggccggttt 300
 cctctcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350
 gggctcactg tagtgcaccc gtggccctgt ccttcttcat attcgagcgt 400
 tgggagtgca ctacgtattg gtacatTTTT gtcttctgca gtgcccttcc 450
 agctgtcact gaaatggctt tattcgtcac cgtctttggg ctgaaaaaga 500
 aacccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550
 ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcggtt 600
 ttcccctcgg aaactgcttc tgctggagga tatgtgttgg aataattacg 650
 tcttgagtct gggattatcc gcattgtatt tagtgctttg taataaaata 700
 tgtttttag tagtaattaag acttatatac agtttttaggg gacaattaaa 750
 aaaaaaaaaa 759

<210> 90
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 90
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 Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
 20 25 30
 Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
 35 40 45
 Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
 50 55 60
 Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
 65 70 75
 Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
 80 85 90
 Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
 95 100 105
 Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
 110 115 120
 Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu

	125	130	135
Lys Lys Lys Pro Phe			
140			

<210> 91
 <211> 1871
 <212> DNA
 <213> Homo Sapien

<400> 91
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 tctatctggt catctgtggc caggatgatg gtcctcccgg ctcagaggac 150
 cctgagcgtg atgaccacga gggccagccc cggccccggg tgcctcggaa 200
 gcggggccac atctcaccta agtcccgccc catggccaat tccactctcc 250
 tagggctgct ggccccgcct ggggaggctt ggggcattct tgggcagccc 300
 cccaaccgcc cgaaccacag cccccaccc tcagccaagg tgaagaaaat 350
 ctttggtggt ggcgacttct actccaacat caagacggtg gccctgaacc 400
 tgctcgtcac agggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
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 gccccccagt aaagctgtag agttccacca ggaacagcag atcttcacg 550
 aagccaaggc ctccaaaatc ttcaactgcc ggatggagtg ggagaaggta 600
 gaacggggcc gccggacctc gctttgcacc cacgaccag ccaagatctg 650
 ctcccagagac cacgctcaga gctcagccac ctggagctgc tcccagccct 700
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 cccatctggg tgaccggggg caggccacag aggccaggcc agggctggaa 850
 ggacaggcct gcccatgcag gagaccatct ggacaccggg cagggaaggg 900
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 aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagtg 1050
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 ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc cccagatcaa 1150
 gtcatgggag gaagctaagc ccttggttct tgccatcctg aggaaagata 1200

gcaacaggga gggggagatt tcatcagtg ggacagcctg tcaacttagg 1250
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gccagaggag ctctccagcc ctgcctagt ggcgccctga gccccttgtc 1350
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gtcttgacag attgaccatc tgtctccagc caggccaccc ctttccaaaa 1450
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<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met	Gln	Leu	Thr	Arg	Cys	Cys	Phe	Val	Phe	Leu	Val	Gln	Gly	Ser
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Leu	Tyr	Leu	Val	Ile	Cys	Gly	Gln	Asp	Asp	Gly	Pro	Pro	Gly	Ser
				20					25					30

Glu	Asp	Pro	Glu	Arg	Asp	Asp	His	Glu	Gly	Gln	Pro	Arg	Pro	Arg
				35					40					45

Val	Pro	Arg	Lys	Arg	Gly	His	Ile	Ser	Pro	Lys	Ser	Arg	Pro	Met
				50					55					60

Ala	Asn	Ser	Thr	Leu	Leu	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Glu	Ala
				65					70					75

Trp	Gly	Ile	Leu	Gly	Gln	Pro	Pro	Asn	Arg	Pro	Asn	His	Ser	Pro
				80					85					90

Pro	Pro	Ser	Ala	Lys	Val	Lys	Lys	Ile	Phe	Gly	Trp	Gly	Asp	Phe
				95					100					105

Tyr	Ser	Asn	Ile	Lys	Thr	Val	Ala	Leu	Asn	Leu	Leu	Val	Thr	Gly
				110					115					120

Lys	Ile	Val	Asp	His	Gly	Asn	Gly	Thr	Phe	Ser	Val	His	Phe	Gln	125	130	135
His	Asn	Ala	Thr	Gly	Gln	Gly	Asn	Ile	Ser	Ile	Ser	Leu	Val	Pro	140	145	150
Pro	Ser	Lys	Ala	Val	Glu	Phe	His	Gln	Glu	Gln	Gln	Ile	Phe	Ile	155	160	165
Glu	Ala	Lys	Ala	Ser	Lys	Ile	Phe	Asn	Cys	Arg	Met	Glu	Trp	Glu	170	175	180
Lys	Val	Glu	Arg	Gly	Arg	Arg	Thr	Ser	Leu	Cys	Thr	His	Asp	Pro	185	190	195
Ala	Lys	Ile	Cys	Ser	Arg	Asp	His	Ala	Gln	Ser	Ser	Ala	Thr	Trp	200	205	210
Ser	Cys	Ser	Gln	Pro	Phe	Lys	Val	Val	Cys	Val	Tyr	Ile	Ala	Phe	215	220	225
Tyr	Ser	Thr	Asp	Tyr	Arg	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp	Tyr	230	235	240
Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Tyr	Pro	Ser	Gly				245	250	

<210> 93

<211> 902

<212> DNA

<213> Homo Sapien

<400> 93

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tatcatcttc ctcatcgccg gagctttctt ctggttggtg tctctactga 150
tttcgtccct tgtttgggtt atggcaagag tcattattga caacaaagat 200
ggaccaacac agaaatatct gctgatcttt ggagcgtttg tctctgtcta 250
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ctgctggcct atgtttcttg cttgggcttt ggaatcatga gtggagtatt 400
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gtcattatct tgctgcatgt attctggggc attgtatatt ttgatggctg 550
tgagaagaaa aagtggggca tcctccttat cgttctcctg acccacctgc 600

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 gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750
 actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800
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 tgaaaatccc tttttctggg ggaattgaga aagaaataaa actatgcaga 900
 ta 902

<210> 94
 <211> 257
 <212> PRT
 <213> Homo Sapien

<400> 94
 Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly
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 Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu
 20 25 30
 Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser
 35 40 45
 Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
 50 55 60
 Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
 65 70 75
 Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
 80 85 90
 Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
 95 100 105
 Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
 110 115 120
 Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
 125 130 135
 Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
 140 145 150
 Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
 155 160 165
 Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
 170 175 180

Cys	Glu	Lys	Lys	Lys	Trp	Gly	Ile	Leu	Leu	Ile	Val	Leu	Leu	Thr
				185					190					195
His	Leu	Leu	Val	Ser	Ala	Gln	Thr	Phe	Ile	Ser	Ser	Tyr	Tyr	Gly
				200					205					210
Ile	Asn	Leu	Ala	Ser	Ala	Phe	Ile	Ile	Leu	Val	Leu	Met	Gly	Thr
				215					220					225
Trp	Ala	Phe	Leu	Ala	Ala	Gly	Gly	Ser	Cys	Arg	Ser	Leu	Lys	Leu
				230					235					240
Cys	Leu	Leu	Cys	Gln	Asp	Lys	Asn	Phe	Leu	Leu	Tyr	Asn	Gln	Arg
				245					250					255

Ser Arg

<210> 95
 <211> 1073
 <212> DNA
 <213> Homo Sapien

<400> 95
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 aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaca 200
 ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250
 accattaaca cagatgctca cactggggcc agatctgcat ctgttaaadc 300
 ctgctgcagg aatgacacct ggtaccaga cccaccatt gaccctggga 350
 gggttgaatg tacaacagca actgcacca catgtgttac caathtttgt 400
 cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450
 aaatcttcac gagcctcatc atccattcct tgttcccggg aggcatacctg 500
 cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttcc 550
 agcaggagga gcagggtgaa atcctgccac ccagggaacc ccagcaggcc 600
 gcctcccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650
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 agcaaatgga attcagtaag ctgtttcaaa ttttttcaac taagctgcct 750
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gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatcccaa 900
 cttttaaaaa caataattca atggataaat ctgtctttga aatataacat 950
 tatgctgcct ggatgatatg catattaaaa catatttgga aaactggaaa 1000
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
 aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96
 <211> 209
 <212> PRT
 <213> Homo Sapien

<400> 96
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 Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
 20 25 30
 Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn
 35 40 45
 Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu
 50 55 60
 Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
 65 70 75
 Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
 80 85 90
 Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr
 95 100 105
 Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro
 110 115 120
 Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly
 125 130 135
 Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp
 140 145 150
 Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln
 155 160 165
 Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp
 170 175 180
 Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His
 185 190 195
 Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln

<210> 97
 <211> 2848
 <212> DNA
 <213> Homo Sapien

<400> 97
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 ttgggcgctg gagggcctgt cctgaccatg gtccctgcct ggctgtggct 150
 gctttgtgtc tccgtccccc aggctctccc caaggcccag cctgcagagc 200
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<211> 414

<212> PRT

<213> Homo Sapien

<400> 102

Met	His	Ser	Arg	Gly	Arg	Glu	Ile	Val	Val	Leu	Leu	Asn	Pro	Trp
1				5					10					15
Ser	Ile	Asn	Glu	Ala	Val	Ser	Ser	Tyr	Cys	Thr	Tyr	Phe	Ile	Lys
				20					25					30
Gln	Asp	Ser	Lys	Ser	Phe	Gly	Ile	Met	Val	Ser	Trp	Lys	Gly	Ile
				35					40					45
Tyr	Phe	Ile	Leu	Thr	Leu	Phe	Trp	Gly	Ser	Phe	Phe	Gly	Ser	Ile
				50					55					60
Phe	Met	Leu	Ser	Pro	Phe	Leu	Pro	Leu	Met	Phe	Val	Asn	Pro	Ser
				65					70					75
Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr
				80					85					90
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile
				95					100					105
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile
				110					115					120
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys
				125					130					135

Leu Met Arg Tyr	Ser Tyr Leu Arg Leu	Glu Lys Ile Cys Leu	Lys
140		145	150
Ala Ser Leu Lys	Gly Val Pro Gly Phe	Gly Trp Ala Met Gln	Ala
155		160	165
Ala Ala Tyr Ile	Phe Ile His Arg Lys	Trp Lys Asp Asp Lys	Ser
170		175	180
His Phe Glu Asp	Met Ile Asp Tyr Phe	Cys Asp Ile His Glu	Pro
185		190	195
Leu Gln Leu Leu	Ile Phe Pro Glu Gly	Thr Asp Leu Thr Glu	Asn
200		205	210
Ser Lys Ser Arg	Ser Asn Ala Phe Ala	Glu Lys Asn Gly Leu	Gln
215		220	225
Lys Tyr Glu Tyr	Val Leu His Pro Arg	Thr Thr Gly Phe Thr	Phe
230		235	240
Val Val Asp Arg	Leu Arg Glu Gly Lys	Asn Leu Asp Ala Val	His
245		250	255
Asp Ile Thr Val	Ala Tyr Pro His Asn	Ile Pro Gln Ser Glu	Lys
260		265	270
His Leu Leu Gln	Gly Asp Phe Pro Arg	Glu Ile His Phe His	Val
275		280	285
His Arg Tyr Pro	Ile Asp Thr Leu Pro	Thr Ser Lys Glu Asp	Leu
290		295	300
Gln Leu Trp Cys	His Lys Arg Trp Glu	Glu Lys Glu Glu Arg	Leu
305		310	315
Arg Ser Phe Tyr	Gln Gly Glu Lys Asn	Phe Tyr Phe Thr Gly	Gln
320		325	330
Ser Val Ile Pro	Pro Cys Lys Ser Glu	Leu Arg Val Leu Val	Val
335		340	345
Lys Leu Leu Ser	Ile Leu Tyr Trp Thr	Leu Phe Ser Pro Ala	Met
350		355	360
Cys Leu Leu Ile	Tyr Leu Tyr Ser Leu	Val Lys Trp Tyr Phe	Ile
365		370	375
Ile Thr Ile Val	Ile Phe Val Leu Gln	Glu Arg Ile Phe Gly	Gly
380		385	390
Leu Glu Ile Ile	Glu Leu Ala Cys Tyr	Arg Leu Leu His Lys	Gln
395		400	405
Pro His Leu Asn	Ser Lys Lys Asn Glu		
410			

<210> 103
<211> 2403
<212> DNA
<213> Homo Sapien

<400> 103
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ttcatagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150
tttggttctc agtttctacg agctggtgtc aggacagtgg caagtcaactg 200
gaccgggcaa gtttgtccag gccttgggtg gggaggacgc cgtgttctcc 250
tgctccctct ttctgagac cagtgcagag gctatggaag tgcggttctt 300
caggaatcag ttccatgctg tgggccacct ctacagagat ggggaagact 350
gggaatctaa gcagatgcc aagtatcgag ggagaactga gtttgtgaag 400
gactccattg caggggggagc tgtctctcta aggctaaaaa acatcaactcc 450
ctcggacatc ggctgtatg ggtgctggtt cagttcccag atttacgatg 500
aggaggccac ctgggagctg cgggtggcag cactgggctc acttctctc 550
atttccatcg tgggatatgt tgacggaggt atccagttac tctgcctgtc 600
ctcaggctgg tttccccagc ccacagccaa gtggaaaggt ccacaaggac 650
aggatttgtc ttcagactcc agagcaaagt cagatgggta cagcctgtat 700
gatgtggaga tctccattat agtccaggaa aatgctggga gcatattgtg 750
ttccatccac cttgctgagc agagtcata ggtggaatcc aaggtattga 800
taggagagac gtttttccag cctcacctt ggcgcctggc ttctatttta 850
ctcgggttac tctgtggtgc cctgtgtggt gttgtcatgg ggatgataat 900
tgttttcttc aaatccaaag ggaaaatcca ggcggaactg gactggagaa 950
gaaagcacgg acaggcagaa ttgagagacg cccggaaaca cgcagtggag 1000
gtgactctgg atccagagac ggctcaccgc aagctctgcg tttctgatct 1050
gaaaactgta acccatagaa aagctcccca ggagggtcct cactctgaga 1100
agagatttac aaggaagagt gtggtggctt ctcagggttt ccaagcaggg 1150
agacattact gggagggtgga cgtgggacaa aatgtagggt ggtatgtggg 1200
agtgtgtcgg gatgacgtag acagggggaa gaacaatgtg actttgtctc 1250
ccaacaatgg gtattgggtc ctcagactga caacagaaca tttgtatttc 1300

acattcaatc cccattttat cagcctcccc cccagcacc ctcctacacg 1350
 agtaggggtc ttcttgact atgaggggtg gaccatctcc ttcttcaata 1400
 caaatgacca gtcccttatt tataccctgc tgacatgtca gtttgaaggc 1450
 ttgttgagac cctatatcca gcatgcatg tatgacgagg aaaaggggac 1500
 tcccatattc atatgtccag tgcctgggg atgagacaga gaagaccctg 1550
 cttaaagggc cccacaccac agaccagac acagccaagg gagagtgtc 1600
 ccgacaggtg gcccagctt cctctccgga gcctgcatc agagagtcac 1650
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 gggagtcaga agccatggct gccctgaagt ggggacggaa tagactcaca 1800
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 tcacaggtga agattaaaga gacaacgaat gtgaatcatg cttgcaggtt 1950
 tgagggcaca gtgtttgcta atgatgtgtt tttatattat acattttccc 2000
 accataaact ctgtttgctt attccacatt aatttacttt tctctatacc 2050
 aaatcaccca tggaatagtt attgaacacc tgctttgtga ggctcaaaga 2100
 ataaagagga ggtaggattt ttcactgatt ctataagccc agcattacct 2150
 gataccaaaa ccaggcaaag aaaacagaag aagaggaagg aaaactacag 2200
 gtccatatcc ctcatataca cagacacaaa aattctaaat aaaattttta 2250
 caaattaaac taaacaatat atttaaagat gatataaac tactcagtgt 2300
 ggtttgctcc acaaatgcag agttgggtta atatttaa atcaaccagt 2350
 gtaattcagc acattaataa agtaaaaaag aaaaccataa aaaaaaaaaa 2400
 aaa 2403

<210> 104

<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

Met	Ala	Phe	Val	Leu	Ile	Leu	Val	Leu	Ser	Phe	Tyr	Glu	Leu	Val
1					5				10				15	

Ser Gly Gln Trp Gln Val Thr Gly Pro Gly Lys Phe Val Gln Ala

20					25					30				
Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu
				35					40					45
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe
				50					55					60
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser
				65					70					75
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp
				80					85					90
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr
				95					100					105
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile
				110					115					120
Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly
				125					130					135
Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile
				140					145					150
Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala
				155					160					165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg
				170					175					180
Ala	Asn	Ala	Asp	Gly	Tyr	Ser	Leu	Tyr	Asp	Val	Glu	Ile	Ser	Ile
				185					190					195
Ile	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Leu	Cys	Ser	Ile	His	Leu
				200					205					210
Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu
				215					220					225
Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu
				230					235					240
Gly	Leu	Leu	Cys	Gly	Ala	Leu	Cys	Gly	Val	Val	Met	Gly	Met	Ile
				245					250					255
Ile	Val	Phe	Phe	Lys	Ser	Lys	Gly	Lys	Ile	Gln	Ala	Glu	Leu	Asp
				260					265					270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys
				275					280					285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys
				290					295					300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro

	305		310		315
Gln Glu Val Pro	His Ser Glu Lys Arg	Phe Thr Arg Lys Ser Val			
	320	325		330	
Val Ala Ser Gln	Gly Phe Gln Ala Gly	Arg His Tyr Trp Glu Val			
	335	340		345	
Asp Val Gly Gln	Asn Val Gly Trp Tyr	Val Gly Val Cys Arg Asp			
	350	355		360	
Asp Val Asp Arg	Gly Lys Asn Asn Val	Thr Leu Ser Pro Asn Asn			
	365	370		375	
Gly Tyr Trp Val	Leu Arg Leu Thr Thr	Glu His Leu Tyr Phe Thr			
	380	385		390	
Phe Asn Pro His	Phe Ile Ser Leu Pro	Pro Ser Thr Pro Pro Thr			
	395	400		405	
Arg Val Gly Val	Phe Leu Asp Tyr Glu	Gly Gly Thr Ile Ser Phe			
	410	415		420	
Phe Asn Thr Asn	Asp Gln Ser Leu Ile	Tyr Thr Leu Leu Thr Cys			
	425	430		435	
Gln Phe Glu Gly	Leu Leu Arg Pro Tyr	Ile Gln His Ala Met Tyr			
	440	445		450	
Asp Glu Glu Lys	Gly Thr Pro Ile Phe	Ile Cys Pro Val Ser Trp			
	455	460		465	

Gly

<210> 105
 <211> 2103
 <212> DNA
 <213> Homo Sapien

<400> 105
 ccttcacagg actcttcatt gctggttggc aatgatgtat cggccagatg 50
 tggtgagggc taggaaaaga gtttggtggg aaccctgggt tatcggcctc 100
 gtcattcttca tatccctgat tgtcctggca gtgtgcattg gactcactgt 150
 tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200
 tgtcatttac aactgacaaa ctatatgctg agtttggcag agaggcttct 250
 aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300
 attttataaa tctccattaa gggaagaatt tgtcaagtct cagggttatca 350
 agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400
 agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450

tgttttacat gaaaagctgc aagatgctgt aggaccccct aaagtagatc 500
 ctactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550
 ctaaaccatt gctgcggaac acgaagaagt aaaactctag gtcagagtct 600
 caggatcggt ggtgggacag aagtagaaga gggatgaatgg ccctggcagg 650
 ctagcctgca gtgggatggg agtcatcgct gtggagcaac ctttaattaat 700
 gccacatggc ttgtgagtgc tgctcactgt ttacaacat ataagaacc 750
 tgccagatgg actgcttcct ttggagtaac aataaaacct tcgaaaatga 800
 aacgggggtct ccggagaata attgtccatg aaaaatacaa acacccatca 850
 catgactatg atatttctct tgcagagctt tctagccctg ttccctacac 900
 aatgcagta catagagttt gtctccctga tgcactctat gagtttcaac 950
 caggatgatgt gatgtttgtg acaggatttg gagcactgaa aatgatggt 1000
 tacagtcaaa atcatcttcg acaagcacag gtgactctca tagacgctac 1050
 aacttgcaat gaacctcaag cttacaatga cgccataact cctagaatgt 1100
 tatgtgctgg ctcccttagaa ggaaaaacag atgcatgcca gggtgactct 1150
 ggaggaccac tggtagttc agatgctaga gatatctggt accttgctgg 1200
 aatagtgagc tggggagatg aatgtgcgaa acccaacaag cctgggtgtt 1250
 atactagagt tacggccttg cgggactgga ttacttcaaa aactgggtatc 1300
 taagagacaa aagcctcatg gaacagataa catttttttt tgttttttgg 1350
 gtgtggaggc cattttttaga gatacagaat tggagaagac ttgcaaaaca 1400
 gctagatttg actgatctca ataaactgtt tgcttgatgc atgtattttc 1450
 ttcccagctc tgttccgcac gtaagcatcc tgcttctgcc agatcaactc 1500
 tgtcatctgt gagcaatagt tgaaacttta tgtacataga gaaatagata 1550
 atacaatatt acattacagc ctgtattcat ttgttctcta gaagttttgt 1600
 cagaattttg acttggtgac ataaatttgt aatgcatata tacaatttga 1650
 agcactcctt ttcttcagtt cctcagctcc tctcatttca gcaaatatcc 1700
 attttcaagg tgcagaacaa ggagtgaag aaaatataag aagaaaaaaa 1750
 tcccctacat ttatttgga cagaaaagta ttaggtgttt ttcttagtgg 1800
 aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850
 aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900

tccagaaaga agccaagata tacccttatt ttcattttcca aacaactact 1950
atgataaatg tgaagaagat tctgtttttt tgtgacctat aataattata 2000
caaacttcat gcaatgtact tgttctaagc aaattaaagc aaatatttat 2050
ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
cca 2103

<210> 106
<211> 423
<212> PRT
<213> Homo Sapien

<400> 106

Met	Met	Tyr	Arg	Pro	Asp	Val	Val	Arg	Ala	Arg	Lys	Arg	Val	Cys	1	5	10	15
Trp	Glu	Pro	Trp	Val	Ile	Gly	Leu	Val	Ile	Phe	Ile	Ser	Leu	Ile	20	25	30	
Val	Leu	Ala	Val	Cys	Ile	Gly	Leu	Thr	Val	His	Tyr	Val	Arg	Tyr	35	40	45	
Asn	Gln	Lys	Lys	Thr	Tyr	Asn	Tyr	Tyr	Ser	Thr	Leu	Ser	Phe	Thr	50	55	60	
Thr	Asp	Lys	Leu	Tyr	Ala	Glu	Phe	Gly	Arg	Glu	Ala	Ser	Asn	Asn	65	70	75	
Phe	Thr	Glu	Met	Ser	Gln	Arg	Leu	Glu	Ser	Met	Val	Lys	Asn	Ala	80	85	90	
Phe	Tyr	Lys	Ser	Pro	Leu	Arg	Glu	Glu	Phe	Val	Lys	Ser	Gln	Val	95	100	105	
Ile	Lys	Phe	Ser	Gln	Gln	Lys	His	Gly	Val	Leu	Ala	His	Met	Leu	110	115	120	
Leu	Ile	Cys	Arg	Phe	His	Ser	Thr	Glu	Asp	Pro	Glu	Thr	Val	Asp	125	130	135	
Lys	Ile	Val	Gln	Leu	Val	Leu	His	Glu	Lys	Leu	Gln	Asp	Ala	Val	140	145	150	
Gly	Pro	Pro	Lys	Val	Asp	Pro	His	Ser	Val	Lys	Ile	Lys	Lys	Ile	155	160	165	
Asn	Lys	Thr	Glu	Thr	Asp	Ser	Tyr	Leu	Asn	His	Cys	Cys	Gly	Thr	170	175	180	
Arg	Arg	Ser	Lys	Thr	Leu	Gly	Gln	Ser	Leu	Arg	Ile	Val	Gly	Gly	185	190	195	
Thr	Glu	Val	Glu	Glu	Gly	Glu	Trp	Pro	Trp	Gln	Ala	Ser	Leu	Gln				

200	205	210
Trp Asp Gly Ser His Arg Cys Gly Ala	Thr Leu Ile Asn Ala Thr	
215	220	225
Trp Leu Val Ser Ala Ala His Cys Phe	Thr Thr Tyr Lys Asn Pro	
230	235	240
Ala Arg Trp Thr Ala Ser Phe Gly Val	Thr Ile Lys Pro Ser Lys	
245	250	255
Met Lys Arg Gly Leu Arg Arg Ile Ile	Val His Glu Lys Tyr Lys	
260	265	270
His Pro Ser His Asp Tyr Asp Ile Ser	Leu Ala Glu Leu Ser Ser	
275	280	285
Pro Val Pro Tyr Thr Asn Ala Val His	Arg Val Cys Leu Pro Asp	
290	295	300
Ala Ser Tyr Glu Phe Gln Pro Gly Asp	Val Met Phe Val Thr Gly	
305	310	315
phe Gly Ala Leu Lys Asn Asp Gly Tyr	Ser Gln Asn His Leu Arg	
320	325	330
Gln Ala Gln Val Thr Leu Ile Asp Ala	Thr Thr Cys Asn Glu Pro	
335	340	345
Gln Ala Tyr Asn Asp Ala Ile Thr Pro	Arg Met Leu Cys Ala Gly	
350	355	360
Ser Leu Glu Gly Lys Thr Asp Ala Cys	Gln Gly Asp Ser Gly Gly	
365	370	375
Pro Leu Val Ser Ser Asp Ala Arg Asp	Ile Trp Tyr Leu Ala Gly	
380	385	390
Ile Val Ser Trp Gly Asp Glu Cys Ala	Lys Pro Asn Lys Pro Gly	
395	400	405
Val Tyr Thr Arg Val Thr Ala Leu Arg	Asp Trp Ile Thr Ser Lys	
410	415	420

Thr Gly Ile

<210> 107
 <211> 2397
 <212> DNA
 <213> Homo Sapien

<400> 107
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cccaggcgagg cgtggggcac cgggcccagc gccgacgac gctgccgttt 150
 tggcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
 gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgccctgctct 250
 acgccctcaa tctgctcttt tggttaatgt ccatcagtgt gttggcagtt 300
 tctgcttgga tgagggacta cctaaataat gttctcactt taactgcaga 350
 aacgagggta gaggaagcag tcattttgac ttactttcct gtgggttcac 400
 cggtcacgat tgctgtttgc tgtttcctta tcattgtggg gatgttagga 450
 tattgtggaa cggtgaaaag aaatctgttg cttcttgcat ggtactttgg 500
 aagtttgctt gtcattttct gtgtagaact ggcttggtgg gtttggacat 550
 atgaacagga acttatggtt ccagtacaat ggtcagatat ggtcactttg 600
 aaagccagga tgacaaatta tggattacct agatatcggg ggcttactca 650
 tgcttggaa ttttttcaga gagagtttaa gtgctgtgga gtagtatatt 700
 tcactgactg gttggaaatg acagagatgg actggccccc agattcctgc 750
 tgtgttagag aattcccagg atgttccaaa caggcccacc aggaagatct 800
 cagtgcctt tatcaagagg gttgtgggaa gaaaatgtat tcctttttga 850
 gaggaaccaa acaactgcag gtgctgaggt ttctgggaat ctccattggg 900
 gtgacacaaa tcctggccat gattctcacc attactctgc tctgggctct 950
 gtattatgat agaaggggagc ctgggacaga ccaaagatg tccttgaaga 1000
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 caaacttggt ttattggact tgtgaatgtt tgagtacata ctatgtgttt 1200
 cagaaatatg tagaaataaa aatgttgcca taaaataaca cctaagcata 1250
 tactattcta tgctttaaaa tgaggatgga aaagtttcat gtcataagtc 1300
 accacctgga caataattga tgcccttaaa atgctgaaga cagatgtcat 1350
 acccactgtg tagcctgtgt atgactttta ctgaacacag ttatgttttg 1400
 aggcagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450
 atgggtgggac tggagccata gtaaagggtt atttacttct accaactagt 1500
 atataaagta ctaattaaat gctaacatag gaagttagaa aatactaata 1550

acttttatta ctcagcgatc tattcttctg atgctaaata aattatatat 1600
cagaaaactt tcaatattgg tgactaccta aatgtgattt ttgctgggta 1650
ctaaaatatt cttaccactt aaaagagcaa gctaacacat tgtcttaagc 1700
tgatcaggga ttttttgtat ataagtctgt gttaaatctg tataattcag 1750
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ctctttttga cactaaacac tttttaaaaa gcttatcttt gccttctcca 2100
aacaagaagc aatagtctcc aagtcaatat aaattctaca gaaaatagtg 2150
ttctttttct ccagaaaaat gcttgtgaga atcattaaaa catgtgacaa 2200
tttagagatt ctttgtttta tttcactgat taatatactg tggcaaatta 2250
cacagattat taaatttttt tacaagagta tagtatattt atttgaaatg 2300
ggaaaagtgc attttactgt attttgtgta ttttgtttat ttctcagaat 2350
atggaaagaa aattaaaatg tgtcaataaa tattttctag agagtaa 2397

<210> 108

<211> 305

<212> PRT

<213> Homo Sapien

<400> 108

Met	Ala	Arg	Glu	Asp	Ser	Val	Lys	Cys	Leu	Arg	Cys	Leu	Leu	Tyr
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Ala	Leu	Asn	Leu	Leu	Phe	Trp	Leu	Met	Ser	Ile	Ser	Val	Leu	Ala
			20						25					30
Val	Ser	Ala	Trp	Met	Arg	Asp	Tyr	Leu	Asn	Asn	Val	Leu	Thr	Leu
			35						40					45
Thr	Ala	Glu	Thr	Arg	Val	Glu	Glu	Ala	Val	Ile	Leu	Thr	Tyr	Phe
			50						55					60
Pro	Val	Val	His	Pro	Val	Met	Ile	Ala	Val	Cys	Cys	Phe	Leu	Ile
			65						70					75
Ile	Val	Gly	Met	Leu	Gly	Tyr	Cys	Gly	Thr	Val	Lys	Arg	Asn	Leu
			80						85					90

Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	
				95					100					105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	
				110					115					120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	
				125					130					135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	
				140					145					150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	
				155					160					165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	
				170					175					180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	
				185					190					195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	
				200					205					210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	
				215					220					225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	
				230					235					240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	
				245					250					255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His	
				260					265					270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg	
				275					280					285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe	
				290					295					300	
Glu	Met	Glu	Glu	Leu											
				305											

<210> 109
 <211> 2339
 <212> DNA
 <213> Homo Sapien

<400> 109
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agtattaaga ggattttcca gtgtttctgg cagttggtcc agaaggatgc 200
 ctccattcct gcttctcacc tgctcttca tcacaggcac ctccgtgtca 250
 cccgtggccc tagatccttg ttctgcttac atcagcctga atgagccctg 300
 gaggaacact gaccaccagt tggatgagtc tcaaggctct cctctatgtg 350
 acaaccatgt gaatggggag tggtagcact tcacgggcat ggcgggagat 400
 gccatgccta ccttctgcat accagaaaac cactgtggaa cccacgcacc 450
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 aatcagaag ctgggtataa tatttcaagt taaaaccct agaaaaatta 2200
 aacagttact gaaattatga cttaaatacc caatgactcc ttaaataatgt 2250
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 ggaatttgga agtgtatcaa taaaacagta tataatttt 2339

<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

Met	Pro	Pro	Phe	Leu	Leu	Leu	Thr	Cys	Leu	Phe	Ile	Thr	Gly	Thr
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Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser
				20					25					30
Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser
				35					40					45
Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr
				50					55					60
His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile
				65					70					75
Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly
				80					85					90
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys
				95					100					105

Ala Ser Phe Asn	Gly Asn Cys Cys Leu	Trp Asn Thr Thr Val	Glu
	110	115	120
Val Lys Ala Cys	Pro Gly Gly Tyr Tyr	Val Tyr Arg Leu Thr	Lys
	125	130	135
Pro Ser Val Cys	Phe His Val Tyr Cys	Gly His Phe Tyr Asp	Ile
	140	145	150
Cys Asp Glu Asp	Cys His Gly Ser Cys	Ser Asp Thr Ser Glu	Cys
	155	160	165
Thr Cys Ala Pro	Gly Thr Val Leu Gly	Pro Asp Arg Gln Thr	Cys
	170	175	180
Phe Asp Glu Asn	Glu Cys Glu Gln Asn	Asn Gly Gly Cys Ser	Glu
	185	190	195
Ile Cys Val Asn	Leu Lys Asn Ser Tyr	Arg Cys Glu Cys Gly	Val
	200	205	210
Gly Arg Val Leu	Arg Ser Asp Gly Lys	Thr Cys Glu Asp Val	Glu
	215	220	225
Gly Cys His Asn	Asn Asn Gly Gly Cys	Ser His Ser Cys Leu	Gly
	230	235	240
Ser Glu Lys Gly	Tyr Gln Cys Glu Cys	Pro Arg Gly Leu Val	Leu
	245	250	255
Ser Glu Asp Asn	His Thr Cys Gln Val	Pro Val Leu Cys Lys	Ser
	260	265	270
Asn Ala Ile Glu	Val Asn Ile Pro Arg	Glu Leu Val Gly Gly	Leu
	275	280	285
Glu Leu Phe Leu	Thr Asn Thr Ser Cys	Arg Gly Val Ser Asn	Gly
	290	295	300
Thr His Val Asn	Ile Leu Phe Ser Leu	Lys Thr Cys Gly Thr	Val
	305	310	315
Val Asp Val Val	Asn Asp Lys Ile Val	Ala Ser Asn Leu Val	Thr
	320	325	330
Gly Leu Pro Lys	Gln Thr Pro Gly Ser	Ser Gly Asp Phe Ile	Ile
	335	340	345
Arg Thr Ser Lys	Leu Leu Ile Pro Val	Thr Cys Glu Phe Pro	Arg
	350	355	360
Leu Tyr Thr Ile	Ser Glu Gly Tyr Val	Pro Asn Leu Arg Asn	Ser
	365	370	375
Pro Leu Glu Ile	Met Ser Arg Asn His	Gly Ile Phe Pro Phe	Thr
	380	385	390

Leu	Glu	Ile	Phe	Lys	Asp	Asn	Glu	Phe	Glu	Glu	Pro	Tyr	Arg	Glu
				395					400					405
Ala	Leu	Pro	Thr	Leu	Lys	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Gly	Ile
				410					415					420
Glu	Pro	Val	Val	His	Val	Ser	Gly	Leu	Glu	Ser	Leu	Val	Glu	Ser
				425					430					435
Cys	Phe	Ala	Thr	Pro	Thr	Ser	Lys	Ile	Asp	Glu	Val	Leu	Lys	Tyr
				440					445					450
Tyr	Leu	Ile	Arg	Asp	Gly	Cys	Val	Ser	Asp	Asp	Ser	Val	Lys	Gln
				455					460					465
Tyr	Thr	Ser	Arg	Asp	His	Leu	Ala	Lys	His	Phe	Gln	Val	Pro	Val
				470					475					480
Phe	Lys	Phe	Val	Gly	Lys	Asp	His	Lys	Glu	Val	Phe	Leu	His	Cys
				485					490					495
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala
				500					505					510
Gln	Gly	Cys	His	Arg	Arg	Met	Arg	Arg	Gly	Ala	Gly	Gly	Glu	Asp
				515					520					525
Ser	Ala	Gly	Leu	Gln	Gly	Gln	Thr	Leu	Thr	Gly	Gly	Pro	Ile	Arg
				530					535					540
Ile	Asp	Trp	Glu	Asp										
				545										

<210> 111
 <211> 2063
 <212> DNA
 <213> Homo Sapien

<400> 111
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 ttctgacctg ctggccagcc aggacctgtg tggggaggcc ctctgctgc 150
 cttgggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200
 agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250
 cgatgtcaaa cccctgcgca aaccccgatat ccccatggag accttcagaa 300
 aggtggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
 attgtggttg tcctcatcaa ggtgattctg gataaatact acttcctctg 400
 cgggcagcct ctccacttca tcccgaggaa gcagctgtgt gacggagagc 450

tggactgtcc cttgggggag gacgaggagc actgtgtcaa gagcttcccc 500
 gaagggcctg cagtggcagt ccgcctctcc aaggaccgat ccacactgca 550
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 tcacagaagc tctcgctgag acagcctgta ggcagatggg ctacagcaga 650
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 ccccgctgtg tgggtgggga ggaggcctct gtggattctt ggccttgga 850
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 acccccactg ggtcctcacg gcagcccact gcttcaggaa acataccgat 950
 gtgttcaact ggaaggtgcg ggcaggctca gacaaactgg gcagcttccc 1000
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 ccaaagacaa tgacatcgcc ctcatgaagc tgcagttccc actcactttc 1100
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 tccagccacc cactctgga tcattggatg gggctttacg aagcagaatg 1200
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tcttcaccca tccccaagcc tactagagca agaaaccagt tgtaataataa 1950
aatgcactgc cctactgttg gtatgactac cgttacctac tgttgtcatt 2000
gttattacag ctatggccac tattattaaa gagctgtgta acatctctgg 2050
caaaaaaaaaaaa aaa 2063

<210> 112.
<211> 432
<212> PRT
<213> Homo Sapien

<400> 112

Met	Leu	Gln	Asp	Pro	Asp	Ser	Asp	Gln	Pro	Leu	Asn	Ser	Leu	Asp	1	5	10	15
Val	Lys	Pro	Leu	Arg	Lys	Pro	Arg	Ile	Pro	Met	Glu	Thr	Phe	Arg	20	25	30	
Lys	Val	Gly	Ile	Pro	Ile	Ile	Ile	Ala	Leu	Leu	Ser	Leu	Ala	Ser	35	40	45	
Ile	Ile	Ile	Val	Val	Val	Leu	Ile	Lys	Val	Ile	Leu	Asp	Lys	Tyr	50	55	60	
Tyr	Phe	Leu	Cys	Gly	Gln	Pro	Leu	His	Phe	Ile	Pro	Arg	Lys	Gln	65	70	75	
Leu	Cys	Asp	Gly	Glu	Leu	Asp	Cys	Pro	Leu	Gly	Glu	Asp	Glu	Glu	80	85	90	
His	Cys	Val	Lys	Ser	Phe	Pro	Glu	Gly	Pro	Ala	Val	Ala	Val	Arg	95	100	105	
Leu	Ser	Lys	Asp	Arg	Ser	Thr	Leu	Gln	Val	Leu	Asp	Ser	Ala	Thr	110	115	120	
Gly	Asn	Trp	Phe	Ser	Ala	Cys	Phe	Asp	Asn	Phe	Thr	Glu	Ala	Leu	125	130	135	
Ala	Glu	Thr	Ala	Cys	Arg	Gln	Met	Gly	Tyr	Ser	Arg	Ala	Val	Glu	140	145	150	
Ile	Gly	Pro	Asp	Gln	Asp	Leu	Asp	Val	Val	Glu	Ile	Thr	Glu	Asn	155	160	165	
Ser	Gln	Glu	Leu	Arg	Met	Arg	Asn	Ser	Ser	Gly	Pro	Cys	Leu	Ser	170	175	180	
Gly	Ser	Leu	Val	Ser	Leu	His	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Leu	185	190	195	
Lys	Thr	Pro	Arg	Val	Val	Gly	Gly	Glu	Glu	Ala	Ser	Val	Asp	Ser	200	205	210	

Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys	215	220	225
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His	230	235	240
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala	245	250	255
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys	260	265	270
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp	275	280	285
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr	290	295	300
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro	305	310	315
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn	320	325	330
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val	335	340	345
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu	350	355	360
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val	365	370	375
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser	380	385	390
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys	395	400	405
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr	410	415	420
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu				425	430	

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

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aagggtgctgt gattataggt gtaagccacc gtgtctggcc tctgaacaac 100

tttttcagca actaaaaaag ccacaggagt tgaactgcta ggattctgac 150

tatgctgtgg tggctagtgc tcctactcct acctacatta aaatctgttt 200
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 ttctacccac accgtcccct cgaagccggg gacagcctca ccttgctggc 350
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gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
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<210> 114
<211> 109
<212> PRT
<213> Homo Sapien

<400> 114
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Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
20 25 30
Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
35 40 45
Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
50 55 60
Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
65 70 75
Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
80 85 90
Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
95 100 105
Arg Arg Arg Asp

<210> 115
<211> 1197
<212> DNA
<213> Homo Sapien

<400> 115
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gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
ttgtggactg gtgtttggta tcttgccct aactctaatt gtctgtttt 200
gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
tgatcctgtg accagaactg aaatattcag aagcggaaat ggcactgatg 350

aaacattgga agtgcacgac tttaaaaaacg gatacactgg catctacttc 400
 gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
 attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
 ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
 aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
 gaccatgtat tggatcaatc ccactcta atcagtttct gagttacaag 650
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 atactgaaaa tggaatagaa tttgatccca tgctggatga gagagggtat 850
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<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

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Asn	Ala	Glu	Ala	Phe	Lys	Ser	Lys	Lys	Ile	Cys	Lys	Ser	Leu	Lys
				20					25					30
Ile	Cys	Gly	Leu	Val	Phe	Gly	Ile	Leu	Ala	Leu	Thr	Leu	Ile	Val
				35					40					45
Leu	Phe	Trp	Gly	Ser	Lys	His	Phe	Trp	Pro	Glu	Val	Pro	Lys	Lys
				50					55					60
Ala	Tyr	Asp	Met	Glu	His	Thr	Phe	Tyr	Ser	Asn	Gly	Glu	Lys	Lys
				65					70					75
Lys	Ile	Tyr	Met	Glu	Ile	Asp	Pro	Val	Thr	Arg	Thr	Glu	Ile	Phe

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Arg	Ser	Gly	Asn	Gly	Thr	Asp	Glu	Thr	Leu	Glu	Val	His	Asp	Phe
				95					100					105
Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys
				110					115					120
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro
				125					130					135
Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe
				140					145					150
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn
				155					160					165
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn
				170					175					180
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu
				185					190					195
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala
				200					205					210
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro
				215					220					225
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu
				230					235					240
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe
				245					250					255
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg
				260					265					270
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly
				275					280					285
Tyr	Tyr	Pro	Tyr	Pro	Tyr	Cys	Tyr	Gln	Gly	Gly	Arg	Val	Ile	Cys
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Arg	Val	Ile	Met	Pro	Cys	Asn	Trp	Trp	Val	Ala	Arg	Met	Leu	Gly
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Arg Val

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

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Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
				20					25					30
Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40					45
Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50					55					60
Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65					70					75
Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80					85					90
Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
				95					100					105
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110					115					120

Ser Gly Ile Met	Phe Ile Val Ser Gly	Leu Cys Ala Ile Ala Gly
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Val Ser Val Phe	Ala Asn Met Leu Val Thr	Asn Phe Trp Met Ser
140	145	150
Thr Ala Asn Met	Tyr Thr Gly Met Gly	Gly Met Val Gln Thr Val
155	160	165
Gln Thr Arg Tyr	Thr Phe Gly Ala Ala	Leu Phe Val Gly Trp Val
170	175	180
Ala Gly Gly Leu	Thr Leu Ile Gly Gly	Val Met Met Cys Ile Ala
185	190	195
Cys Arg Gly Leu	Ala Pro Glu Glu Thr	Asn Tyr Lys Ala Val Ser
200	205	210
Tyr His Ala Ser	Gly His Ser Val Ala	Tyr Lys Pro Gly Gly Phe
215	220	225
Lys Ala Ser Thr	Gly Phe Gly Ser Asn	Thr Lys Asn Lys Lys Ile
230	235	240
Tyr Asp Gly Gly	Ala Arg Thr Glu Asp	Glu Val Gln Ser Tyr Pro
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Ser Lys His Asp	Tyr Val	
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<210> 119
 <211> 2010
 <212> DNA
 <213> Homo Sapien

<400> 119
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 tgctgcttcc gtgatgtcct tcttggttt catgatggcc atccttgga 400
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<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

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Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp
				20					25					30

Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn
				35					40					45

Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile
				50					55					60

Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro
				65					70					75

Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met
				80					85					90

Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr
				95					100					105

Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu
				110					115					120

Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile
				125					130					135

Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn
				140					145					150

Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu
				155					160					165

Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala
				170					175					180

Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr
				185					190					195

Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His
				200					205					210

Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val
				215					220					225

<210> 121

<211> 1257
<212> DNA
<213> Homo Sapien

<400> 121

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<210> 122

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 122

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				20					25					30
Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg
				35					40					45
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala
				50					55					60
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro
				65					70					75
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys
				80					85					90
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn
				95					100					105
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu
				110					115					120
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser
				125					130					135
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg
				140					145					150
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu
				155					160					165
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln
				170					175					180
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser
				185					190					195
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp
				200					205					210
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp
				215					220					225
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu
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<210> 123

<211> 2379
<212> DNA
<213> Homo Sapien

<400> 123

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 ccattgtgat aaaaagagct cttaaaagct gggaaataag tggtgcttta 2100
 ttgaactctg gtgactatca agggaacgag atgccccccc tccccctccc 2150
 tctccctctc actttgggtg caagatcctt ccttgctcgt tttagtgcag 2200
 tcataatact ggtcattttc ctctcataca taatcaaccc attgaaattt 2250
 aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300
 ttgtataaga ccctttactg attccattaa tgtcgcattt gttttaagat 2350
 aaaacttctt tcataggtaa aaaaaaaaaa 2379

<210> 124
 <211> 513
 <212> PRT
 <213> Homo Sapien

<400> 124
 Met Gly Phe Asn Val Ile Arg Leu Leu Ser Gly Ser Ala Val Ala
 1 5 10 15
 Leu Val Ile Ala Pro Thr Val Leu Leu Thr Met Leu Ser Ser Ala
 20 25 30
 Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val
 35 40 45

Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser	
				50					55					60	
Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys	
				65					70					75	
Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu	
				80					85					90	
Tyr	Leu	Asp	His	Asn	His	Ile	Ser	Asn	Ile	Asp	Glu	Asn	Ala	Phe	
				95					100					105	
Asn	Gly	Ile	Arg	Arg	Leu	Lys	Glu	Leu	Ile	Leu	Ser	Ser	Asn	Arg	
				110					115					120	
Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu	
				125					130					135	
Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser	
				140					145					150	
Glu	Gln	Phe	Arg	Gly	Leu	Arg	Lys	Leu	Leu	Ser	Leu	His	Leu	Arg	
				155					160					165	
Ser	Asn	Ser	Leu	Arg	Thr	Ile	Pro	Val	Arg	Ile	Phe	Gln	Asp	Cys	
				170					175					180	
Arg	Asn	Leu	Glu	Leu	Leu	Asp	Leu	Gly	Tyr	Asn	Arg	Ile	Arg	Ser	
				185					190					195	
Leu	Ala	Arg	Asn	Val	Phe	Ala	Gly	Met	Ile	Arg	Leu	Lys	Glu	Leu	
				200					205					210	
His	Leu	Glu	His	Asn	Gln	Phe	Ser	Lys	Leu	Asn	Leu	Ala	Leu	Phe	
				215					220					225	
Pro	Arg	Leu	Val	Ser	Leu	Gln	Asn	Leu	Tyr	Leu	Gln	Trp	Asn	Lys	
				230					235					240	
Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu	
				245					250					255	
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly	
				260					265					270	
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu	
				275					280					285	
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser	
				290					295					300	
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu	
				305					310					315	
Cys	Ser	Arg	Asn	Ile	Cys	Ser	Leu	Val	Asn	Trp	Leu	Lys	Ser	Phe	
				320					325					330	

Lys Gly Leu Arg	Glu Asn Thr Ile Ile	Cys Ala Ser Pro Lys Glu	335	340	345
Leu Gln Gly Val	Asn Val Ile Asp Ala Val	Lys Asn Tyr Ser Ile	350	355	360
Cys Gly Lys Ser	Thr Thr Glu Arg Phe	Asp Leu Ala Arg Ala Leu	365	370	375
Pro Lys Pro Thr	Phe Lys Pro Lys Leu	Pro Arg Pro Lys His Glu	380	385	390
Ser Lys Pro Pro	Leu Pro Pro Thr Val	Gly Ala Thr Glu Pro Gly	395	400	405
Pro Glu Thr Asp	Ala Asp Ala Glu His	Ile Ser Phe His Lys Ile	410	415	420
Ile Ala Gly Ser	Val Ala Leu Phe Leu	Ser Val Leu Val Ile Leu	425	430	435
Leu Val Ile Tyr	Val Ser Trp Lys Arg	Tyr Pro Ala Ser Met Lys	440	445	450
Gln Leu Gln Gln	Arg Ser Leu Met Arg	Arg His Arg Lys Lys Lys	455	460	465
Arg Gln Ser Leu	Lys Gln Met Thr Pro	Ser Thr Gln Glu Phe Tyr	470	475	480
Val Asp Tyr Lys	Pro Thr Asn Thr Glu	Thr Ser Glu Met Leu Leu	485	490	495
Asn Gly Thr Gly	Pro Cys Thr Tyr Asn	Lys Ser Gly Ser Arg Glu	500	505	510

Cys Glu Val

<210> 125

<211> 998

<212> DNA

<213> Homo Sapien

<400> 125

ccgttatcgt cttgcgctac tgctgaatgt ccgtcccga ggaggaggag 50

aggcttttgc cgctgaccca gagatggccc cgagcgagca aattcctact 100

gtccggctgc gcggtaccg tggccgagct agcaaccttt cccctggatc 150

tcacaaaaac tcgactcaa atgcaaggag aagcagctct tgctcggttg 200

ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250

cctagggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300

caccgcgcat ttacagacac gtagtgtatt ctggagggtcg aatgggcaca 350
tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400
tcccctttgg aatcagtc tggagggat gatggctggt gttattggcc 450
agtttttagc caatccaact gacctagtga aggttcagat gcaaattggaa 500
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550
tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttgggcag 600
gctgggtacc caatatacaa agagcagcac tgggtgaatat gggagattta 650
accacttatg atacagtga aactacttg gtattgaata caccattga 700
ggacaatatc atgactcacg gtttatcaag tttatgttct ggactggtag 750
cttctattct gggaacacca gccgatgtca tcaaaagcag aataatgaat 800
caaccacgag ataaacaagg aaggggactt ttgtataaat catcgactga 850
ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
gctttttacc atcttggtg agaatgaccc cttgggtcaat ggtgttctgg 950
cttacttatg aaaaaatcag agagatgagt ggagtcagtc cattttaa 998

<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

Met	Ser	Val	Pro	Glu	Glu	Glu	Glu	Arg	Leu	Leu	Pro	Leu	Thr	Gln
1				5					10					15
Arg	Trp	Pro	Arg	Ala	Ser	Lys	Phe	Leu	Leu	Ser	Gly	Cys	Ala	Ala
				20					25					30
Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35					40					45
Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
				50					55					60
Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
				65					70					75
Leu	Gly	Ile	Ile	Glu	Glu	Glu	Gly	Phe	Leu	Lys	Leu	Trp	Gln	Gly
				80					85					90
Val	Thr	Pro	Ala	Ile	Tyr	Arg	His	Val	Val	Tyr	Ser	Gly	Gly	Arg
				95					100					105
Met	Val	Thr	Tyr	Glu	His	Leu	Arg	Glu	Val	Val	Phe	Gly	Lys	Ser
				110					115					120

Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met	125	130	135
Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu	140	145	150
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly	155	160	165
Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile	170	175	180
Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro	185	190	195
Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr	200	205	210
Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu	215	220	225
Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu	230	235	240
Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg	245	250	255
Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr	260	265	270
Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly	275	280	285
Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met	290	295	300
Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg	305	310	315
Glu Met Ser Gly Val Ser Pro Phe	320		

<210> 127
 <211> 1505
 <212> DNA
 <213> Homo Sapien

<400> 127
 cgcgatcgg acccaagcag gtcggcggcg gcggcaggag agcggccggg 50
 cgtcagctcc tcgacccccg tgtcgggcta gtccagcgag gcggacgggc 100
 ggcgtgggcc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150
 gcgctggtga cgggggcctc ggggggcata ggcgcggccg tggcccgggc 200
 cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250

acatcgagga gctggctgct gaatgtaaga gtgcaggcta ccccgaggact 300
 ttgatccctt acagatgtga cctatcaaat gaagaggaca tcctctccat 350
 gttctcagct atccgttctc agcacagcgg tgtagacatc tgcatacaaca 400
 atgctggctt ggcccgccct gacaccctgc tctcaggcag caccagtggc 450
 tggaaggaca tgttcaatgt gaacgtgctg gccctcagca tctgcacacg 500
 ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550
 ttaacatcaa tagcatgtct ggccaccgag tgttaccctt gtctgtgacc 600
 cacttctata gtgccaccaa gtatgccgtc actgcgctga cagagggact 650
 gaggcaagag cttcgggagg ccagaccca catccgagcc acgtgcatct 700
 ctccaggtgt ggtggagaca caattcgcct tcaaactcca cgacaaggac 750
 cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccgga 800
 ggatgtggcc gaggtgttta tctacgtcct cagcaccctc gcacacatcc 850
 agattggaga catccagatg agggccacgg agcaggtgac ctagtgactg 900
 tgggagctcc tccttccctc cccacccttc atggcttgcc tcctgcctct 950
 ggattttagg tgttgatttc tggatcacgg gataccactt cctgtccaca 1000
 ccccgaccag gggctagaaa atttgtttga gatttttata tcattctgtc 1050
 aaattgcttc agttgtaa atgtgaaaaatg ggctggggaa aggaggtggc 1100
 gtccctaatt gttttacttg ttaacttggt cttgtgcccc tgggcacttg 1150
 gcctttgtct gctctcagtg tcttcccttt gacatgggaa aggagttgtg 1200
 gccaaaatcc ccattctctt gcacctcaac gtctgtggct cagggctggg 1250
 gtggcagagg gaggccttca cttatatct gtgttggtat ccagggctcc 1300
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 ccttctcggc tccccagccc agtcttggct tcttgctccc tcctgggggtc 1400
 atccctccac tctgactctg actatggcag cagaacacca gggcctggcc 1450
 cagtggattt catggtgatc attaaaaaag aaaaatcgca accaaaaaaa 1500
 aaaaa 1505

<210> 128
 <211> 260
 <212> PRT
 <213> Homo Sapien

<400> 128

Met	Ala	Arg	Pro	Gly	Met	Glu	Arg	Trp	Arg	Asp	Arg	Leu	Ala	Leu	
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Val	Thr	Gly	Ala	Ser	Gly	Gly	Ile	Gly	Ala	Ala	Val	Ala	Arg	Ala	
				20					25					30	
Leu	Val	Gln	Gln	Gly	Leu	Lys	Val	Val	Gly	Cys	Ala	Arg	Thr	Val	
				35					40					45	
Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	
				50					55					60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	
				65					70					75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	
				80					85					90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	
				95					100					105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	
				110					115					120	
Asn	Val	Leu	Ala	Leu	Ser	Ile	Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	
				125					130					135	
Met	Lys	Glu	Arg	Asn	Val	Asp	Asp	Gly	His	Ile	Ile	Asn	Ile	Asn	
				140					145					150	
Ser	Met	Ser	Gly	His	Arg	Val	Leu	Pro	Leu	Ser	Val	Thr	His	Phe	
				155					160					165	
Tyr	Ser	Ala	Thr	Lys	Tyr	Ala	Val	Thr	Ala	Leu	Thr	Glu	Gly	Leu	
				170					175					180	
Arg	Gln	Glu	Leu	Arg	Glu	Ala	Gln	Thr	His	Ile	Arg	Ala	Thr	Cys	
				185					190					195	
Ile	Ser	Pro	Gly	Val	Val	Glu	Thr	Gln	Phe	Ala	Phe	Lys	Leu	His	
				200					205					210	
Asp	Lys	Asp	Pro	Glu	Lys	Ala	Ala	Ala	Thr	Tyr	Glu	Gln	Met	Lys	
				215					220					225	
Cys	Leu	Lys	Pro	Glu	Asp	Val	Ala	Glu	Ala	Val	Ile	Tyr	Val	Leu	
				230					235					240	
Ser	Thr	Pro	Ala	His	Ile	Gln	Ile	Gly	Asp	Ile	Gln	Met	Arg	Pro	
				245					250					255	
Thr	Glu	Gln	Val	Thr											
				260											

<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

aactttctaca tgggcctcct gctgctggtg ctcttctca gccctcctgcc 50
ggtggcctac accatcatgt cctcccacc ctcttttgac tgcgggccgt 100
tcaggtgcag agtctcagtt gcccgggagc acctccctc ccgaggcagt 150
ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200
tgtaaaaggc catggaactt tgggtgaatc accgatgcca ttttaagaggg 250
ttttctgccg gatggaaat gttaggctgt tctgtgtctg cgctgttcat 300
ttcagtagcc accagccacc tgtggccgtt gagtgcctga aatgaggaac 350
tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400
actgatagtt gtacatattt gggggtacat gtgatatttg gatacatgta 450
tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500
acatttattt ttattctttt ttagacagag tctactctg tcaccaggc 550
tggagtgcag tgggtccatc tcagcttact gcaacctctg cctgccaggt 600
tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650
gcaccacaat gcccaactaa tttttgtatt tttagtagag acgggggttt 700
gccatgttgc ccaggctggc cttgaactcc tggcctcaaa caatccactt 750
gcctcggcct cccaagtgt tatgattaca ggcgtgagcc accgtgcctg 800
gcctaaacat ttatcttttc tttgtgttgg gaactttgaa attatacaat 850
gaattattgt taactgtcat ctccctgctg tgctatggaa cactgggact 900
tcttccctct atctaactgt atatttgtac cagttaacca accgtacttc 950
atccccactc ctctctatcc ttcccacct ctgatcacct cattctactc 1000
tctacctcca tgagatccac ttttttagct ccacatgtg agtaagaaaa 1050
tgcaatattt gtctttctgt gcctggctta tttcacttaa cataatgact 1100
tctgttcca tccatgttgc tgcaaatgac aggatttctg tcttaatttc 1150
aattaaaata accacacatg gcaaaaa 1177

<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val

1	5	10	15
Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro	20	25	30
Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg	35	40	45
Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val	50	55	60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro	65	70	75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser	80	85	90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val	95	100	105
Ala Val Glu Cys Leu Lys	110		

<210> 131
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 131
 ttctgaagta acggaagcta ccttgtataa agacctcaac actgctgacc 50
 atgatcagcg cagcctggag catcttctc atcgggacta aaattgggct 100
 gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
 tgtgtcgctg cgatgcgggt ttcatttact gtaatgatcg ctttctgaca 200
 tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
 caaccaata aataatgctg ggattccttc agatttgaaa aacttgctga 300
 aagtagaaag aatataccta taccacaaca gtttagatga atttcctacc 350
 aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
 gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
 atttagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500
 cgagacagca actatctccg actgcttttc ctgtcccgta atcaccttag 550
 cacaattccc tgggggttgc ccaggactat agaagaacta cgcttggatg 600
 ataatcgcat atccactatt tcatcaccat ctcttcaagg tctcactagt 650
 ctaaaacgcc tggttctaga tggaaacctg ttgaacaatc atgggttagg 700

tgacaaagtt ttcttcaacc tagttaatth gacagagctg tccctgggtgc 750
 ggaattccct gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800
 aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850
 ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900
 gtaatttacc tcagggtatc tttgatgatt tggacaatat aacacaactg 950
 attcttcgca acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000
 tgactggtta caatcactac ctgtgaaggt caacgtgcgt gggctcatgt 1050
 gccaaagcccc agaaaagggt cgtgggatgg ctattaagga tctcaatgca 1100
 gaactgtttg attgtaagga cagtgggatt gtaagcacca ttcagataac 1150
 cactgcaata cccaacacag tgtatcctgc ccaaggacag tggccagctc 1200
 cagtgaccaa acagccagat attagaacc ccaagctcac taaggatcaa 1250
 caaaccacag ggagtcctc aagaaaaaca attacaatta ctgtgaagtc 1300
 tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350
 ctgctttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400
 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450
 agccctggag cctgattcac cctataaagt atgcatgggt cccatggaaa 1500
 ccagcaacct ctacctattt gatgaaactc ctgtttgtat tgagactgaa 1550
 actgcacccc ttogaatgta caacctaca accacctca atcgagagca 1600
 agagaaagaa ccttacaaaa accccaattt acctttggct gccatcattg 1650
 gtggggctgt ggccctgggt accattgccc ttcttgcttt agtgtgttg 1700
 tatgttcata ggaatggatc gctcttctca aggaactgtg catatagcaa 1750
 agggaggaga agaaaggatg actatgcaga agctggcact aagaaggaca 1800
 actctatcct ggaaatcagg gaaacttctt ttcagatgtt accaataagc 1850
 aatgaaccca tctcgaagga ggagtttgta atacacacca tatttcctcc 1900
 taatggaatg aatctgtaca aaaacaatca cagtgaagc agtagtaacc 1950
 gaagctacag agacagtggg attccagact cagatcactc aactcatga 2000
 tgctgaagga ctacacgag acttggtgtt tgggtttttt aaacctaaagg 2050
 gaggtgatgg t 2061

<210> 132

<211> 649
 <212> PRT
 <213> Homo Sapien

<400> 132

Met	Ile	Ser	Ala	Ala	Trp	Ser	Ile	Phe	Leu	Ile	Gly	Thr	Lys	Ile	
1				5					10					15	
Gly	Leu	Phe	Leu	Gln	Val	Ala	Pro	Leu	Ser	Val	Met	Ala	Lys	Ser	
				20					25					30	
Cys	Pro	Ser	Val	Cys	Arg	Cys	Asp	Ala	Gly	Phe	Ile	Tyr	Cys	Asn	
				35					40					45	
Asp	Arg	Phe	Leu	Thr	Ser	Ile	Pro	Thr	Gly	Ile	Pro	Glu	Asp	Ala	
				50					55					60	
Thr	Thr	Leu	Tyr	Leu	Gln	Asn	Asn	Gln	Ile	Asn	Asn	Ala	Gly	Ile	
				65					70					75	
Pro	Ser	Asp	Leu	Lys	Asn	Leu	Leu	Lys	Val	Glu	Arg	Ile	Tyr	Leu	
				80					85					90	
Tyr	His	Asn	Ser	Leu	Asp	Glu	Phe	Pro	Thr	Asn	Leu	Pro	Lys	Tyr	
				95					100					105	
Val	Lys	Glu	Leu	His	Leu	Gln	Glu	Asn	Asn	Ile	Arg	Thr	Ile	Thr	
				110					115					120	
Tyr	Asp	Ser	Leu	Ser	Lys	Ile	Pro	Tyr	Leu	Glu	Glu	Leu	His	Leu	
				125					130					135	
Asp	Asp	Asn	Ser	Val	Ser	Ala	Val	Ser	Ile	Glu	Glu	Gly	Ala	Phe	
				140					145					150	
Arg	Asp	Ser	Asn	Tyr	Leu	Arg	Leu	Leu	Phe	Leu	Ser	Arg	Asn	His	
				155					160					165	
Leu	Ser	Thr	Ile	Pro	Trp	Gly	Leu	Pro	Arg	Thr	Ile	Glu	Glu	Leu	
				170					175					180	
Arg	Leu	Asp	Asp	Asn	Arg	Ile	Ser	Thr	Ile	Ser	Ser	Pro	Ser	Leu	
				185					190					195	
Gln	Gly	Leu	Thr	Ser	Leu	Lys	Arg	Leu	Val	Leu	Asp	Gly	Asn	Leu	
				200					205					210	
Leu	Asn	Asn	His	Gly	Leu	Gly	Asp	Lys	Val	Phe	Phe	Asn	Leu	Val	
				215					220					225	
Asn	Leu	Thr	Glu	Leu	Ser	Leu	Val	Arg	Asn	Ser	Leu	Thr	Ala	Ala	
				230					235					240	
Pro	Val	Asn	Leu	Pro	Gly	Thr	Asn	Leu	Arg	Lys	Leu	Tyr	Leu	Gln	
				245					250					255	
Asp	Asn	His	Ile	Asn	Arg	Val	Pro	Pro	Asn	Ala	Phe	Ser	Tyr	Leu	

260										265					270				
Arg	Gln	Leu	Tyr	Arg	Leu	Asp	Met	Ser	Asn	Asn	Asn	Asn	Leu	Ser	Asn				
275										280					285				
Leu	Pro	Gln	Gly	Ile	Phe	Asp	Asp	Leu	Asp	Asn	Ile	Thr	Gln	Leu					
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Pro	Ala	Gln	Gly	Gln	Trp	Pro	Ala	Pro	Val	Thr	Lys	Gln	Pro	Asp					
380										385					390				
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395										400					405				
Pro	Ser	Arg	Lys	Thr	Ile	Thr	Ile	Thr	Val	Lys	Ser	Val	Thr	Ser					
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Asp	Thr	Ile	His	Ile	Ser	Trp	Lys	Leu	Ala	Leu	Pro	Met	Thr	Ala					
425										430					435				
Leu	Arg	Leu	Ser	Trp	Leu	Lys	Leu	Gly	His	Ser	Pro	Ala	Phe	Gly					
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455										460					465				
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Cys	Ile	Glu	Thr	Glu	Thr	Ala	Pro	Leu	Arg	Met	Tyr	Asn	Pro	Thr					
500										505					510				
Thr	Thr	Leu	Asn	Arg	Glu	Gln	Glu	Lys	Glu	Pro	Tyr	Lys	Asn	Pro					
515										520					525				
Asn	Leu	Pro	Leu	Ala	Ala	Ile	Ile	Gly	Gly	Ala	Val	Ala	Leu	Val					
530										535					540				
Thr	Ile	Ala	Leu	Leu	Ala	Leu	Val	Cys	Trp	Tyr	Val	His	Arg	Asn					

	545		550		555
Gly Ser Leu Phe	Ser Arg Asn Cys Ala	Tyr Ser Lys Gly Arg	Arg		
	560	565	570		
Arg Lys Asp Asp	Tyr Ala Glu Ala Gly	Thr Lys Lys Asp Asn	Ser		
	575	580	585		
Ile Leu Glu Ile	Arg Glu Thr Ser Phe	Gln Met Leu Pro Ile	Ser		
	590	595	600		
Asn Glu Pro Ile	Ser Lys Glu Glu Phe	Val Ile His Thr Ile	Phe		
	605	610	615		
Pro Pro Asn Gly	Met Asn Leu Tyr Lys	Asn Asn His Ser Glu	Ser		
	620	625	630		
Ser Ser Asn Arg	Ser Tyr Arg Asp Ser	Gly Ile Pro Asp Ser	Asp		
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His Ser His Ser					

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

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<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

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Arg	Gly	Ser	Leu	Gly	Leu	Ala	Arg	Ala	Gln	Gly	Ala	Glu	Arg	Val
			20						25					30

Thr	Ser	Ser	Glu	Gln	Arg	Pro	Ala	Met	Ala	Ser	Leu	Gly	Leu	Leu	35	40	45
Leu	Leu	Leu	Leu	Leu	Thr	Ala	Leu	Pro	Pro	Leu	Trp	Ser	Ser	Ser	50	55	60
Leu	Pro	Gly	Leu	Asp	Thr	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Ala	Asp	65	70	75
Leu	Ile	Leu	Ser	Ala	Leu	Glu	Arg	Ala	Thr	Val	Phe	Leu	Glu	Gln	80	85	90
Arg	Leu	Pro	Glu	Ile	Asn	Leu	Asp	Gly	Met	Val	Gly	Val	Arg	Val	95	100	105
Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	110	115	120
pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	125	130	135
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	140	145	150
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	155	160	165
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	170	175	180
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	185	190	195
Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp	200	205	210
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	215	220	225
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	230	235	240
phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	245	250	255
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	260	265	270
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	275	280	285
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly	290	295	300
phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser	305	310	315

Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp Ala Glu
 320 325 330
 Asp Glu Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe Ser
 335 340 345
 Arg Arg Val Lys Arg Arg Glu Lys Gln Phe Pro Asp Ser Arg Ser
 350 355 360
 Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln
 365 370 375
 Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ile Leu Pro
 380 385 390
 Ser Ser Trp Asp Tyr Arg Ser Val Pro Pro Tyr Leu Ala Asn Phe
 395 400 405
 Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala
 410 415 420
 Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser
 425 430 435
 Gln Ser Val Gly Leu
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<210> 135
 <211> 884
 <212> DNA
 <213> Homo Sapien

<400> 135
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<210> 136

<211> 242

<212> PRT

<213> Homo Sapien

<400> 136

Met	Ala	Ala	Ala	Leu	Trp	Gly	Phe	Phe	Pro	Val	Leu	Leu	Leu	Leu	1	5	10	15
Leu	Leu	Ser	Gly	Asp	Val	Gln	Ser	Ser	Glu	Val	Pro	Gly	Ala	Ala	20	25	30	
Ala	Glu	Gly	Ser	Gly	Gly	Ser	Gly	Val	Gly	Ile	Gly	Asp	Arg	Phe	35	40	45	
Lys	Ile	Glu	Gly	Arg	Ala	Val	Val	Pro	Gly	Val	Lys	Pro	Gln	Asp	50	55	60	
Trp	Ile	Ser	Ala	Ala	Arg	Val	Leu	Val	Asp	Gly	Glu	Glu	His	Val	65	70	75	
Gly	Phe	Leu	Lys	Thr	Asp	Gly	Ser	Phe	Val	Val	His	Asp	Ile	Pro	80	85	90	
Ser	Gly	Ser	Tyr	Val	Val	Glu	Val	Val	Ser	Pro	Ala	Tyr	Arg	Phe	95	100	105	
Asp	Pro	Val	Arg	Val	Asp	Ile	Thr	Ser	Lys	Gly	Lys	Met	Arg	Ala	110	115	120	
Arg	Tyr	Val	Asn	Tyr	Ile	Lys	Thr	Ser	Glu	Val	Val	Arg	Leu	Pro	125	130	135	
Tyr	Pro	Leu	Gln	Met	Lys	Ser	Ser	Gly	Pro	Pro	Ser	Tyr	Phe	Ile	140	145	150	
Lys	Arg	Glu	Ser	Trp	Gly	Trp	Thr	Asp	Phe	Leu	Met	Asn	Pro	Met	155	160	165	
Val	Met	Met	Met	Val	Leu	Pro	Leu	Leu	Ile	Phe	Val	Leu	Leu	Pro	170	175	180	
Lys	Val	Val	Asn	Thr	Ser	Asp	Pro	Asp	Met	Arg	Arg	Glu	Met	Glu	185	190	195	
Gln	Ser	Met	Asn	Met	Leu	Asn	Ser	Asn	His	Glu	Leu	Pro	Asp	Val				

	200		205		210
Ser Glu Phe Met	Thr Arg Leu Phe Ser	Ser Lys Ser Ser Gly Lys			
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Ser Ser Ser Gly	Ser Ser Lys Thr Gly	Lys Ser Gly Ala Gly Lys			
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Arg Arg

<210> 137
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 137
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<210> 138
 <211> 261
 <212> PRT
 <213> Homo Sapien

<400> 138
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 35 40 45
 Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
 50 55 60
 Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
 65 70 75
 Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
 80 85 90
 Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
 95 100 105
 Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
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 Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
 125 130 135
 Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu

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<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

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Glu	Val	Leu	Gly	Ile	Ala	Val	Phe	Leu	Arg	Gly	Phe	Phe	Pro	Ala
				20					25					30
Pro	Val	Arg	Ser	Ser	Ala	Arg	Ala	Glu	His	Gly	Ala	Glu	Pro	Pro
				35					40					45
Ala	Pro	Glu	Pro	Ser	Ala	Gly	Ala	Ser	Ser	Asn	Trp	Thr	Thr	Leu
				50					55					60
Pro	Pro	Pro	Leu	Phe	Ser	Lys	Val	Val	Ile	Val	Leu	Ile	Asp	Ala
				65					70					75
Leu	Arg	Asp	Asp	Phe	Val	Phe	Gly	Ser	Lys	Gly	Val	Lys	Phe	Met
				80					85					90
Pro	Tyr	Thr	Thr	Tyr	Leu	Val	Glu	Lys	Gly	Ala	Ser	His	Ser	Phe
				95					100					105
Val	Ala	Glu	Ala	Lys	Pro	Pro	Thr	Val	Thr	Met	Pro	Arg	Ile	Lys
				110					115					120
Ala	Leu	Met	Thr	Gly	Ser	Leu	Pro	Gly	Phe	Val	Asp	Val	Ile	Arg
				125					130					135
Asn	Leu	Asn	Ser	Pro	Ala	Leu	Leu	Glu	Asp	Ser	Val	Ile	Arg	Gln
				140					145					150
Ala	Lys	Ala	Ala	Gly	Lys	Arg	Ile	Val	Phe	Tyr	Gly	Asp	Glu	Thr
				155					160					165
Trp	Val	Lys	Leu	Phe	Pro	Lys	His	Phe	Val	Glu	Tyr	Asp	Gly	Thr
				170					175					180
Thr	Ser	Phe	Phe	Val	Ser	Asp	Tyr	Thr	Glu	Val	Asp	Asn	Asn	Val

	185		190		195
Thr Arg His Leu	Asp Lys Val Leu Lys Arg Gly Asp Trp Asp Ile				
	200		205		210
Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser					
	215		220		225
Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp					
	230		235		240
Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg					
	245		250		255
Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly					
	260		265		270
Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val					
	275		280		285
Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro					
	290		295		300
Gly Asp Ile Arg His Pro Lys His Val Gln					
	305		310		

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

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cact 754

<210> 142

<211> 193

<212> PRT

<213> Homo Sapien

<400> 142

Met	Leu	Leu	Leu	Leu	Leu	Glu	Tyr	Asn	Phe	Pro	Ile	Glu	Asn	Asn
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Cys	Gln	His	Leu	Lys	Thr	Thr	His	Thr	Phe	Arg	Val	Lys	Asn	Leu
				20					25					30

Asn	Pro	Lys	Lys	Phe	Ser	Ile	His	Asp	Gln	Asp	His	Lys	Val	Leu
				35					40					45

Val	Leu	Asp	Ser	Gly	Asn	Leu	Ile	Ala	Val	Pro	Asp	Lys	Asn	Tyr
				50					55					60

Ile	Arg	Pro	Glu	Ile	Phe	Phe	Ala	Leu	Ala	Ser	Ser	Leu	Ser	Ser
				65					70					75

Ala	Ser	Ala	Glu	Lys	Gly	Ser	Pro	Ile	Leu	Leu	Gly	Val	Ser	Lys
				80					85					90

Gly	Glu	Phe	Cys	Leu	Tyr	Cys	Asp	Lys	Asp	Lys	Gly	Gln	Ser	His
				95					100					105

Pro	Ser	Leu	Gln	Leu	Lys	Lys	Glu	Lys	Leu	Met	Lys	Leu	Ala	Ala
				110					115					120

Gln	Lys	Glu	Ser	Ala	Arg	Arg	Pro	Phe	Ile	Phe	Tyr	Arg	Ala	Gln
				125					130					135

Val	Gly	Ser	Trp	Asn	Met	Leu	Glu	Ser	Ala	Ala	His	Pro	Gly	Trp
				140					145					150

Phe	Ile	Cys	Thr	Ser	Cys	Asn	Cys	Asn	Glu	Pro	Val	Gly	Val	Thr
				155					160					165

Asp	Lys	Phe	Glu	Asn	Arg	Lys	His	Ile	Glu	Phe	Ser	Phe	Gln	Pro
				170					175					180

Val	Cys	Lys	Ala	Glu	Met	Ser	Pro	Ser	Glu	Val	Ser	Asp		
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<210> 143

<211> 961

<212> DNA

<213> Homo Sapien

<400> 143

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<210> 144
 <211> 147
 <212> PRT
 <213> Homo Sapien

<400> 144
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 20 25 30
 Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
 35 40 45
 Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
 50 55 60

Gln	Ser	Lys	Asp	Tyr	Tyr	Ala	Tyr	Arg	Leu	Gly	His	Ile	Leu	Asn
				65					70					75
Ser	Trp	Lys	Glu	Gln	Val	Glu	Ser	Lys	Thr	Val	Phe	Ser	Met	Glu
				80					85					90
Leu	Leu	Leu	Gly	Arg	Thr	Arg	Cys	Gly	Lys	Phe	Glu	Asp	Asp	Ile
				95					100					105
Asp	Asn	Cys	His	Phe	Gln	Glu	Ser	Thr	Glu	Leu	Asn	Asn	Thr	Phe
				110					115					120
Thr	Cys	Phe	Phe	Thr	Ile	Ser	Thr	Arg	Pro	Trp	Met	Thr	Gln	Phe
				125					130					135
Ser	Leu	Leu	Asn	Lys	Thr	Cys	Leu	Glu	Gly	Phe	His			
				140					145					

<210> 145

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 145

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gaatcaagtg gaaccggaag gccctgcccc gcactgcccc gatcactgag 200
gcccaggtgg ctgagaaccg cccgggagcc ttcattcaagc aaggccgcaa 250
gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300
actggcagtt ccccgatggc atccactaca acggtctgctc tgaggctaata 350
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cctagcagag cgtctggcac actagattag tagtaaagtc ttgatgagaa 850

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<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met	Arg	Lys	His	Leu	Ser	Trp	Trp	Trp	Leu	Ala	Thr	Val	Cys	Met
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Leu	Leu	Phe	Ser	His	Leu	Ser	Ala	Val	Gln	Thr	Arg	Gly	Ile	Lys
				20					25					30
His	Arg	Ile	Lys	Trp	Asn	Arg	Lys	Ala	Leu	Pro	Ser	Thr	Ala	Gln
				35					40					45
Ile	Thr	Glu	Ala	Gln	Val	Ala	Glu	Asn	Arg	Pro	Gly	Ala	Phe	Ile
				50					55					60
Lys	Gln	Gly	Arg	Lys	Leu	Asp	Ile	Asp	Phe	Gly	Ala	Glu	Gly	Asn
				65					70					75
Arg	Tyr	Tyr	Glu	Ala	Asn	Tyr	Trp	Gln	Phe	Pro	Asp	Gly	Ile	His
				80					85					90
Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val
				95					100					105
Thr	Gly	Cys	Ile	Asn	Ala	Thr	Gln	Ala	Ala	Asn	Gln	Gly	Glu	Phe
				110					115					120
Gln	Lys	Pro	Asp	Asn	Lys	Leu	His	Gln	Gln	Val	Leu	Trp	Arg	Leu
				125					130					135
Val	Gln	Glu	Leu	Cys	Ser	Leu	Lys	His	Cys	Glu	Phe	Trp	Leu	Glu
				140					145					150
Arg	Gly	Ala	Gly	Leu	Arg	Val	Thr	Met	His	Gln	Pro	Val	Leu	Leu
				155					160					165
Cys	Leu	Leu	Ala	Leu	Ile	Trp	Leu	Met	Val	Lys				
				170					175					

<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

<400> 147
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 cagaagctct cttctcttct ggctcctct ctgtcttctt tccctctttc 150
 ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
 tttcattttg cttgtcagtg gggtaggtca ctgagtctta gtttttattt 250
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 atgagtatat tgcatgatgc tgagggtttgg ggt 333

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 148
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 Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
 20 25 30
 Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
 35 40 45
 Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
 50 55 60
 Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
 65 70

<210> 149
 <211> 1893
 <212> DNA
 <213> Homo Sapien

<400> 149
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 cccacacccc accctctggt ctcttctgt tttactcct ccttttcatt 200
 cataacaaaa gctacagctc caggagccca gcgccgggct gtgacccaag 250

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 ttgctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450
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 aatgacagag ccgtgtttga caagattggt tctaaactac ttaatctcgg 800
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 aaagtaaagt tgtatgtaag ctgaaaaaaaa aaaaaaaaaa aaa 1893

<210> 150
 <211> 468
 <212> PRT
 <213> Homo Sapien

<400> 150

Met	Gly	Phe	Leu	Gly	Thr	Gly	Thr	Trp	Ile	Leu	Val	Leu	Val	Leu	1	5	10	15
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Leu	His	Asn	Arg	Glu	Leu	Ser	Ala	Glu	Arg	Pro	Leu	Asn	Glu	Gln	35	40	45	
Ile	Ala	Glu	Ala	Glu	Glu	Asp	Lys	Ile	Lys	Lys	Thr	Tyr	Pro	Pro	50	55	60	
Glu	Asn	Lys	Pro	Gly	Gln	Ser	Asn	Tyr	Ser	Phe	Val	Asp	Asn	Leu	65	70	75	
Asn	Leu	Leu	Lys	Ala	Ile	Thr	Glu	Lys	Glu	Lys	Ile	Glu	Lys	Glu	80	85	90	
Arg	Gln	Ser	Ile	Arg	Ser	Ser	Pro	Leu	Asp	Asn	Lys	Leu	Asn	Val	95	100	105	
Glu	Asp	Val	Asp	Ser	Thr	Lys	Asn	Arg	Lys	Leu	Ile	Asp	Asp	Tyr	110	115	120	
Asp	Ser	Thr	Lys	Ser	Gly	Leu	Asp	His	Lys	Phe	Gln	Asp	Asp	Pro	125	130	135	
Asp	Gly	Leu	His	Gln	Leu	Asp	Gly	Thr	Pro	Leu	Thr	Ala	Glu	Asp	140	145	150	
Ile	Val	His	Lys	Ile	Ala	Ala	Arg	Ile	Tyr	Glu	Glu	Asn	Asp	Arg	155	160	165	
Ala	Val	Phe	Asp	Lys	Ile	Val	Ser	Lys	Leu	Leu	Asn	Leu	Gly	Leu	170	175	180	
Ile	Thr	Glu	Ser	Gln	Ala	His	Thr	Leu	Glu	Asp	Glu	Val	Ala	Glu	185	190	195	
Val	Leu	Gln	Lys	Leu	Ile	Ser	Lys	Glu	Ala	Asn	Asn	Tyr	Glu	Glu	200	205	210	
Asp	Pro	Asn	Lys	Pro	Thr	Ser	Trp	Thr	Glu	Asn	Gln	Ala	Gly	Lys				

	215	220	225
Ile Pro Glu Lys Val Thr Pro Met Ala	Ala Ile Gln Asp Gly Leu		
230	235	240	
Ala Lys Gly Glu Asn Asp Glu Thr Val Ser Asn Thr Leu Thr Leu			
245	250	255	
Thr Asn Gly Leu Glu Arg Arg Thr Lys Thr Tyr Ser Glu Asp Asn			
260	265	270	
Phe Glu Glu Leu Gln Tyr Phe Pro Asn Phe Tyr Ala Leu Leu Lys			
275	280	285	
Ser Ile Asp Ser Glu Lys Glu Ala Lys Glu Lys Glu Thr Leu Ile			
290	295	300	
Thr Ile Met Lys Thr Leu Ile Asp Phe Val Lys Met Met Val Lys			
305	310	315	
Tyr Gly Thr Ile Ser Pro Glu Glu Gly Val Ser Tyr Leu Glu Asn			
320	325	330	
Leu Asp Glu Met Ile Ala Leu Gln Thr Lys Asn Lys Leu Glu Lys			
335	340	345	
Asn Ala Thr Asp Asn Ile Ser Lys Leu Phe Pro Ala Pro Ser Glu			
350	355	360	
Lys Ser His Glu Glu Thr Asp Ser Thr Lys Glu Glu Ala Ala Lys			
365	370	375	
Met Glu Lys Glu Tyr Gly Ser Leu Lys Asp Ser Thr Lys Asp Asp			
380	385	390	
Asn Ser Asn Pro Gly Gly Lys Thr Asp Glu Pro Lys Gly Lys Thr			
395	400	405	
Glu Ala Tyr Leu Glu Ala Ile Arg Lys Asn Ile Glu Trp Leu Lys			
410	415	420	
Lys His Asp Lys Lys Gly Asn Lys Glu Asp Tyr Asp Leu Ser Lys			
425	430	435	
Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys			
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Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr			
455	460	465	
Ser Ser Leu			

<210> 151
 <211> 2598
 <212> DNA
 <213> Homo Sapien

<400> 151

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ggtctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

Met	Val	Leu	Ser	Gly	Ala	Leu	Cys	Phe	Arg	Met	Lys	Asp	Ser	Ala
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 20 25 30
 Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val
 35 40 45
 pro Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly
 50 55 60
 val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu
 65 70 75
 pro Thr Leu Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu
 80 85 90
 Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met
 95 100 105
 Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe
 110 115 120
 Leu Cys Thr Val Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln
 125 130 135
 Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro Ile Thr Asp Phe Tyr
 140 145 150
 phe Gln Gln Cys Asp
 155

<210> 153
 <211> 1152
 <212> DNA
 <213> Homo Sapien

<400> 153
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 ccctggccac cagctgcctc cttctcttgg ccctcttggt acagggagga 150
 gcagctgcgc ccatcagctc ccaactgcagg cttgacaagt ccaacttcca 200
 gcagccctat atcaccaacc gcaccttcat gctggctaag gaggctagct 250
 tggctgataa caacacagac gttcgtctca ttggggagaa actgttccac 300
 ggagtcagta tgagtgaagc ctgctatctg atgaagcagg tgctgaactt 350
 cacccttgaa gaagtgtgt tccctcaatc tgatagggtc cagccttata 400
 tgcaggaggt ggtgcccttc ctggccaggc tcagcaacag gctaagcaca 450
 tgtcatattg aaggtgatga cctgcatatc cagaggaatg tgcaaaagct 500
 gaaggacaca gtgaaaaagc ttggagagag ttgagagatc aaagcaattg 550

gagaactgga tttgctgttt atgtctctga gaaatgcctg catttgacca 600
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 caattagatg ccccaaagcg atttttttta accaaaagga agatgggaag 700
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 ataatcagta ctttatattt ataaatgtat ttattattat tataagactg 1000
 cattttattt atatcatttt attaatatgg atttatttat agaaacatca 1050
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<210> 154

<211> 179

<212> PRT

<213> Homo Sapien

<400> 154

Met	Ala	Ala	Leu	Gln	Lys	Ser	Val	Ser	Ser	Phe	Leu	Met	Gly	Thr
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Leu	Ala	Thr	Ser	Cys	Leu	Leu	Leu	Leu	Ala	Leu	Leu	Val	Gln	Gly
				20					25					30
Gly	Ala	Ala	Ala	Pro	Ile	Ser	Ser	His	Cys	Arg	Leu	Asp	Lys	Ser
				35					40					45
Asn	Phe	Gln	Gln	Pro	Tyr	Ile	Thr	Asn	Arg	Thr	Phe	Met	Leu	Ala
				50					55					60
Lys	Glu	Ala	Ser	Leu	Ala	Asp	Asn	Asn	Thr	Asp	Val	Arg	Leu	Ile
				65					70					75
Gly	Glu	Lys	Leu	Phe	His	Gly	Val	Ser	Met	Ser	Glu	Arg	Cys	Tyr
				80					85					90
Leu	Met	Lys	Gln	Val	Leu	Asn	Phe	Thr	Leu	Glu	Glu	Val	Leu	Phe
				95					100					105
Pro	Gln	Ser	Asp	Arg	Phe	Gln	Pro	Tyr	Met	Gln	Glu	Val	Val	Pro
				110					115					120

Phe	Leu	Ala	Arg	Leu	Ser	Asn	Arg	Leu	Ser	Thr	Cys	His	Ile	Glu
				125					130					135
Gly	Asp	Asp	Leu	His	Ile	Gln	Arg	Asn	Val	Gln	Lys	Leu	Lys	Asp
				140					145					150
Thr	Val	Lys	Lys	Leu	Gly	Glu	Ser	Gly	Glu	Ile	Lys	Ala	Ile	Gly
				155					160					165
Glu	Leu	Asp	Leu	Leu	Phe	Met	Ser	Leu	Arg	Asn	Ala	Cys	Ile	
				170					175					

<210> 155

<211> 1320

<212> DNA

<213> Homo Sapien

<400> 155

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cccagcatgt accagggtcag tgcagagggc tgcctgaggg ctgtgctgag 150
agggagagga gcagagatgc tgctgagggg ggagggaggc caagctgcca 200
ggtttggggc tgggggccaa gtggagttag aaactgggat cccaggggga 250
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gcacttctgc acattttgaa aagagcagct gctgcttagg gccgccgga 1000

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 ccctggcccc gcacaggcac tttctagata tttccccctt gctggagaag 1150
 aaagagcccc tggttttatt tgtttgttta ctcatcactc agtgagcatc 1200
 tactttgggt gcattctagt gtagttacta gtcttttgac atggatgatt 1250
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<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met	Arg	Glu	Arg	Pro	Arg	Leu	Gly	Glu	Asp	Ser	Ser	Leu	Ile	Ser
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Leu	Phe	Leu	Gln	Val	Val	Ala	Phe	Leu	Ala	Met	Val	Met	Gly	Thr
			20						25					30
His	Thr	Tyr	Ser	His	Trp	Pro	Ser	Cys	Cys	Pro	Ser	Lys	Gly	Gln
			35						40					45
Asp	Thr	Ser	Glu	Glu	Leu	Leu	Arg	Trp	Ser	Thr	Val	Pro	Val	Pro
			50						55					60
Pro	Leu	Glu	Pro	Ala	Arg	Pro	Asn	Arg	His	Pro	Glu	Ser	Cys	Arg
			65						70					75
Ala	Ser	Glu	Asp	Gly	Pro	Leu	Asn	Ser	Arg	Ala	Ile	Ser	Pro	Trp
			80						85					90
Arg	Tyr	Glu	Leu	Asp	Arg	Asp	Leu	Asn	Arg	Leu	Pro	Gln	Asp	Leu
			95						100					105
Tyr	His	Ala	Arg	Cys	Leu	Cys	Pro	His	Cys	Val	Ser	Leu	Gln	Thr
			110						115					120
Gly	Ser	His	Met	Asp	Pro	Arg	Gly	Asn	Ser	Glu	Leu	Leu	Tyr	His
			125						130					135
Asn	Gln	Thr	Val	Phe	Tyr	Arg	Arg	Pro	Cys	His	Gly	Glu	Lys	Gly
			140						145					150
Thr	His	Lys	Gly	Tyr	Cys	Leu	Glu	Arg	Arg	Leu	Tyr	Arg	Val	Ser
			155						160					165
Leu	Ala	Cys	Val	Cys	Val	Arg	Pro	Arg	Val	Met	Gly			
			170						175					

<210> 157
<211> 1515
<212> DNA
<213> Homo Sapien

<400> 157
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cgagtagaac ctgttacaac tagtgttgca acaggggact attcaatttt 200
gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
aggccaccaa gatttggtg acgggcaaaa gcaacttcca gtccacagc 300
tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
tggtggtaaa tggacatttt cctacatcgg ctccctgta gagctgaaca 400
cagtctattt cattggggcc cataatattc ctaatgcaaa tatgaatgaa 450
gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggatac 550
cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
tatcatcggg ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacggtg 750
cagctgactc catattttcc tacttggtggc agcgactgca tccgacataa 800
aggaacagtt gtgctctgcc cacaacaggg cgtccctttc cctctggata 850
acaacaaaag caagccggga ggctggctgc ctctcctcct gctgtctctg 900
ctgggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
cgaaaggata aagaagactt ctttttctac caccacacta ctgccccca 1000
ttaaggttct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050
tgttacttca ctgaatttct tcaaaacat tgcagaagtg aggtcatcct 1100
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gacgtcaaca gtgtgtgcga tggtagctgt ggcaagagcg agggcagtc 1250
cagtgagaac tctcaagacc tcttccccct tgcctttaac cttttctgca 1300

gtgatctaag aagccagatt catctgcaca aatacgtggt ggtctacttt 1350
agagagattg atacaaaaga cgattacaat gctctcagtg tctgcccacaa 1400
gtaccacctc atgaaggatg ccaactgcttt ctgtgcagaa cttctccatg 1450
tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
tgctgctcct tgtag 1515

<210> 158
<211> 502
<212> PRT
<213> Homo Sapien

<400> 158

Met	Ser	Leu	Val	Leu	Leu	Ser	Leu	Ala	Ala	Leu	Cys	Arg	Ser	Ala	
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Val	Pro	Arg	Glu	Pro	Thr	Val	Gln	Cys	Gly	Ser	Glu	Thr	Gly	Pro	
				20					25					30	
Ser	Pro	Glu	Trp	Met	Leu	Gln	His	Asp	Leu	Ile	Pro	Gly	Asp	Leu	
				35					40					45	
Arg	Asp	Leu	Arg	Val	Glu	Pro	Val	Thr	Thr	Ser	Val	Ala	Thr	Gly	
				50					55					60	
Asp	Tyr	Ser	Ile	Leu	Met	Asn	Val	Ser	Trp	Val	Leu	Arg	Ala	Asp	
				65					70					75	
Ala	Ser	Ile	Arg	Leu	Leu	Lys	Ala	Thr	Lys	Ile	Cys	Val	Thr	Gly	
				80					85					90	
Lys	Ser	Asn	Phe	Gln	Ser	Tyr	Ser	Cys	Val	Arg	Cys	Asn	Tyr	Thr	
				95					100					105	
Glu	Ala	Phe	Gln	Thr	Gln	Thr	Arg	Pro	Ser	Gly	Gly	Lys	Trp	Thr	
				110					115					120	
Phe	Ser	Tyr	Ile	Gly	Phe	Pro	Val	Glu	Leu	Asn	Thr	Val	Tyr	Phe	
				125					130					135	
Ile	Gly	Ala	His	Asn	Ile	Pro	Asn	Ala	Asn	Met	Asn	Glu	Asp	Gly	
				140					145					150	
Pro	Ser	Met	Ser	Val	Asn	Phe	Thr	Ser	Pro	Gly	Cys	Leu	Asp	His	
				155					160					165	
Ile	Met	Lys	Tyr	Lys	Lys	Lys	Cys	Val	Lys	Ala	Gly	Ser	Leu	Trp	
				170					175					180	
Asp	Pro	Asn	Ile	Thr	Ala	Cys	Lys	Lys	Asn	Glu	Glu	Thr	Val	Glu	
				185					190					195	
Val	Asn	Phe	Thr	Thr	Thr	Pro	Leu	Gly	Asn	Arg	Tyr	Met	Ala	Leu	

200	205	210
Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu Pro		
215	220	225
His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr		
230	235	240
Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro		
245	250	255
Thr Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu		
260	265	270
Cys Pro Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser		
275	280	285
Lys Pro Gly Gly Trp Leu Pro Leu Leu Leu Leu Ser Leu Leu Val		
290	295	300
Ala Thr Trp Val Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His		
305	310	315
Glu Arg Ile Lys Lys Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro		
320	325	330
Pro Ile Lys Val Leu Val Val Tyr Pro Ser Glu Ile Cys Phe His		
335	340	345
His Thr Ile Cys Tyr Phe Thr Glu Phe Leu Gln Asn His Cys Arg		
350	355	360
Ser Glu Val Ile Leu Glu Lys Trp Gln Lys Lys Lys Ile Ala Glu		
365	370	375
Met Gly Pro Val Gln Trp Leu Ala Thr Gln Lys Lys Ala Ala Asp		
380	385	390
Lys Val Val Phe Leu Leu Ser Asn Asp Val Asn Ser Val Cys Asp		
395	400	405
Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser Glu Asn Ser Gln		
410	415	420
Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser Asp Leu Arg		
425	430	435
Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe Arg Glu		
440	445	450
Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro Lys		
455	460	465
Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu		
470	475	480
His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys		

485

490

495

His Asp Gly Cys Cys Ser Leu
500

<210> 159
<211> 535
<212> DNA
<213> Homo Sapien

<400> 159
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agttgccgc ctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200
caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250
cctccccctg gaattacact gtcacttggg accccaaccg gtaccctcg 300
gaagttgtac aggcccagtg taggaacttg ggctgcatca atgctcaagg 350
aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400
tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450
gtgctggtga ctgttggtg cacctgcgtc acccctgtca tccaccatgt 500
gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160
<211> 163
<212> PRT
<213> Homo Sapien

<400> 160
Met Thr Val Lys Thr Leu His Gly Pro Ala Met Val Lys Tyr Leu
1 5 10 15
Leu Leu Ser Ile Leu Gly Leu Ala Phe Leu Ser Glu Ala Ala Ala
20 25 30
Arg Lys Ile Pro Lys Val Gly His Thr Phe Phe Gln Lys Pro Glu
35 40 45
Ser Cys Pro Pro Val Pro Gly Gly Ser Met Lys Leu Asp Ile Gly
50 55 60
Ile Ile Asn Glu Asn Gln Arg Val Ser Met Ser Arg Asn Ile Glu
65 70 75
Ser Arg Ser Thr Ser Pro Trp Asn Tyr Thr Val Thr Trp Asp Pro
80 85 90

Asn	Arg	Tyr	Pro	Ser	Glu	Val	Val	Gln	Ala	Gln	Cys	Arg	Asn	Leu
				95					100					105
Gly	Cys	Ile	Asn	Ala	Gln	Gly	Lys	Glu	Asp	Ile	Ser	Met	Asn	Ser
			110						115					120
Val	Pro	Ile	Gln	Gln	Glu	Thr	Leu	Val	Val	Arg	Arg	Lys	His	Gln
			125						130					135
Gly	Cys	Ser	Val	Ser	Phe	Gln	Leu	Glu	Lys	Val	Leu	Val	Thr	Val
			140						145					150
Gly	Cys	Thr	Cys	Val	Thr	Pro	Val	Ile	His	His	Val	Gln		
			155						160					

<210> 161
 <211> 2380
 <212> DNA
 <213> Homo Sapien

<400> 161
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 gtcaggactc ccaggacaga gagtgcacaa actaccacgc acagccccct 100
 ccgccccctc tggaggctga agagggattc cagcccctgc caccacacaga 150
 cacgggctga ctgggggtgc tgccccctt gggggggggc agcacagggc 200
 ctcaggcctg ggtgccacct ggacactaga agatgcctgt gccctggttc 250
 ttgctgtcct tggcactggg ccgaagccca gtggtccttt ctctggagag 300
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 gtgccagaag gagaccgact gtgacctctg tctgcgtgtg gctgtccact 500
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tcagccagcc ctggatagct acttccatcc cccggggact cccgcgcgg 2300
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ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met	Pro	Val	Pro	Trp	Phe	Leu	Leu	Ser	Leu	Ala	Leu	Gly	Arg	Ser
1				5					10					15
Pro	Val	Val	Leu	Ser	Leu	Glu	Arg	Leu	Val	Gly	Pro	Gln	Asp	Ala
				20					25					30
Thr	His	Cys	Ser	Pro	Gly	Leu	Ser	Cys	Arg	Leu	Trp	Asp	Ser	Asp
				35					40					45
Ile	Leu	Cys	Leu	Pro	Gly	Asp	Ile	Val	Pro	Ala	Pro	Gly	Pro	Val
				50					55					60
Leu	Ala	Pro	Thr	His	Leu	Gln	Thr	Glu	Leu	Val	Leu	Arg	Cys	Gln
				65					70					75
Lys	Glu	Thr	Asp	Cys	Asp	Leu	Cys	Leu	Arg	Val	Ala	Val	His	Leu
				80					85					90
Ala	Val	His	Gly	His	Trp	Glu	Glu	Pro	Glu	Asp	Glu	Glu	Lys	Phe
				95					100					105
Gly	Gly	Ala	Ala	Asp	Ser	Gly	Val	Glu	Glu	Pro	Arg	Asn	Ala	Ser
				110					115					120
Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr	Pro	Thr	Ala
				125					130					135
Arg	Cys	Val	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Ala	Leu	Val	Gln
				140					145					150
Phe	Gly	Gln	Ser	Val	Gly	Ser	Val	Val	Tyr	Asp	Cys	Phe	Glu	Ala
				155					160					165
Ala	Leu	Gly	Ser	Glu	Val	Arg	Ile	Trp	Ser	Tyr	Thr	Gln	Pro	Arg
				170					175					180
Tyr	Glu	Lys	Glu	Leu	Asn	His	Thr	Gln	Gln	Leu	Pro	Ala	Leu	Pro
				185					190					195
Trp	Leu	Asn	Val	Ser	Ala	Asp	Gly	Asp	Asn	Val	His	Leu	Val	Leu
				200					205					210
Asn	Val	Ser	Glu	Glu	Gln	His	Phe	Gly	Leu	Ser	Leu	Tyr	Trp	Asn
				215					220					225
Gln	Val	Gln	Gly	Pro	Pro	Lys	Pro	Arg	Trp	His	Lys	Asn	Leu	Thr
				230					235					240
Gly	Pro	Gln	Ile	Ile	Thr	Leu	Asn	His	Thr	Asp	Leu	Val	Pro	Cys

	245		250		255
Leu Cys Ile Gln Val Trp Pro Leu Glu	260	Pro Asp Ser Val Arg Thr	265		270
Asn Ile Cys Pro Phe Arg Glu Asp Pro	275	Arg Ala His Gln Asn Leu	280		285
Trp Gln Ala Ala Arg Leu Arg Leu Leu	290	Thr Leu Gln Ser Trp Leu	295		300
Leu Asp Ala Pro Cys Ser Leu Pro Ala	305	Glu Ala Ala Leu Cys Trp	310		315
Arg Ala Pro Gly Gly Asp Pro Cys Gln	320	Pro Leu Val Pro Pro Leu	325		330
Ser Trp Glu Asn Val Thr Val Asp Lys	335	Val Leu Glu Phe Pro Leu	340		345
Leu Lys Gly His Pro Asn Leu Cys Val	350	Gln Val Asn Ser Ser Glu	355		360
Lys Leu Gln Leu Gln Glu Cys Leu Trp	365	Ala Asp Ser Leu Gly Pro	370		375
Leu Lys Asp Asp Val Leu Leu Leu Glu	380	Thr Arg Gly Pro Gln Asp	385		390
Asn Arg Ser Leu Cys Ala Leu Glu Pro	395	Ser Gly Cys Thr Ser Leu	400		405
Pro Ser Lys Ala Ser Thr Arg Ala Ala	410	Arg Leu Gly Glu Tyr Leu	415		420
Leu Gln Asp Leu Gln Ser Gly Gln Cys	425	Leu Gln Leu Trp Asp Asp	430		435
Asp Leu Gly Ala Leu Trp Ala Cys Pro	440	Met Asp Lys Tyr Ile His	445		450
Lys Arg Trp Ala Leu Val Trp Leu Ala	455	Cys Leu Leu Phe Ala Ala	460		465
Ala Leu Ser Leu Ile Leu Leu Leu Lys	470	Lys Asp His Ala Lys Gly	475		480
Trp Leu Arg Leu Leu Lys Gln Asp Val	485	Arg Ser Gly Ala Ala Ala	490		495
Arg Gly Arg Ala Ala Leu Leu Leu Tyr	500	Ser Ala Asp Asp Ser Gly	505		510
phe Glu Arg Leu Val Gly Ala Leu Ala	515	Ser Ala Leu Cys Gln Leu	520		525
pro Leu Arg Val Ala Val Asp Leu Trp		Ser Arg Arg Glu Leu Ser			

530					535					540				
Ala	Gln	Gly	Pro	Val	Ala	Trp	Phe	His	Ala	Gln	Arg	Arg	Gln	Thr
				545					550					555
Leu	Gln	Glu	Gly	Gly	Val	Val	Val	Leu	Leu	Phe	Ser	Pro	Gly	Ala
				560					565					570
Val	Ala	Leu	Cys	Ser	Glu	Trp	Leu	Gln	Asp	Gly	Val	Ser	Gly	Pro
				575					580					585
Gly	Ala	His	Gly	Pro	His	Asp	Ala	Phe	Arg	Ala	Ser	Leu	Ser	Cys
				590					595					600
Val	Leu	Pro	Asp	Phe	Leu	Gln	Gly	Arg	Ala	Pro	Gly	Ser	Tyr	Val
				605					610					615
Gly	Ala	Cys	Phe	Asp	Arg	Leu	Leu	His	Pro	Asp	Ala	Val	Pro	Ala
				620					625					630
Leu	Phe	Arg	Thr	Val	Pro	Val	Phe	Thr	Leu	Pro	Ser	Gln	Leu	Pro
				635					640					645
Asp	Phe	Leu	Gly	Ala	Leu	Gln	Gln	Pro	Arg	Ala	Pro	Arg	Ser	Gly
				650					655					660
Arg	Leu	Gln	Glu	Arg	Ala	Glu	Gln	Val	Ser	Arg	Ala	Leu	Gln	Pro
				665					670					675
Ala	Leu	Asp	Ser	Tyr	Phe	His	Pro	Pro	Gly	Thr	Pro	Ala	Pro	Gly
				680					685					690
Arg	Gly	Val	Gly	Pro	Gly	Ala	Gly	Pro	Gly	Ala	Gly	Asp	Gly	Thr
				695					700					705

<210> 163
 <211> 2478
 <212> DNA
 <213> Homo Sapien

<400> 163
 gtcagtgcgg gaggccggtc agccaccaag atgactgaca gggtcagctc 50
 tctgcagcac actaccctca agccacctga tgtgacctgt atctccaaag 100
 tgagatcgat tcagatgatt gttcatacta cccccacgcc aatccgtgca 150
 ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200
 ccacttagag ctccaggtca accgcaccta ccaaatacac cttggaggga 250
 agcagagaga atatgagttc ttcggcctga cccctgacac agagttcctt 300
 ggcaccatca tgatttgcgt tcccacctgg gccaaaggaga gtgcccccta 350
 catgtgccga gtgaagacac tgccagaccg gacatggacc tactccttct 400

Cggagcctt cctgtttctc atgggcttcc tcgtcgagc actctgctac 450
 Cttagctaca gatatgtcac caagccgctt gcacctccca actccctgaa 500
 Cgtccagcga gtccctgactt tccagccgct gcgcttcac caggagcacg 550
 Tcctgatccc tgtctttgac ctccagcgcc ccagcagtct ggcccagcct 600
 Gtccagtaact cccagatcag ggtgtctgga cccagggagc ccgcaggagc 650
 Tccacagcgg catagcctgt ccgagatcac ctacttaggg cagccagaca 700
 Tctccatcct ccagccctcc aacgtgccac ctccccagat cctctcccca 750
 Ctgtcctatg ccccaaagc tgccctgag gtcgggcccc catcctatgc 800
 Acctcaggtg acccccgaag ctcaattccc attctacgcc ccacaggcca 850
 Tctctaaggt ccagccttcc tcctatgcc ctcaagccac tccggacagc 900
 Tggcctccct cctatgggt atgcatggaa ggttctggca aagactcccc 950
 Cactgggaca ctttctagtc ctaaaccct taggcctaaa ggtcagcttc 1000
 Agaaagagcc accagctgga agctgcatgt taggtggcct ttctctgcag 1050
 Gagggtgacct ccttggtat ggaggaatcc caagaagcaa aatcattgca 1100
 Ccagcccctg gggatttga cagacagaac atctgaccca aatgtgctac 1150
 Acagtgggga ggaagggaca ccacagtacc taaagggcca gctccccctc 1200
 Ctctcctcag tccagatcga gggccacccc atgtccctcc ctttgcaacc 1250
 Tccttccggt ccatgttccc cctcggaaca aggtccaagt ccctggggcc 1300
 Tgctggagtc ccttgtgtgt cccaaggatg aagccaagag cccagcccct 1350
 Gagacctcag acctggagca gcccacagaa ctggattctc ttttcagagg 1400
 Cctggccctg actgtgcagt gggagtctg aggggaatgg gaaaggcttg 1450
 Gtgcttctc cctgtcccta cccagtgtca catccttggc tgtcaatccc 1500
 Atgcctgccc atgccacaca ctctcgatc tggcctcaga cgggtgccct 1550
 Tgagagaagc agaggagtg gcatgcaggg cccctgccat gggcgctc 1600
 Ctcaccggaa caaagcagca tgataaggac tgcagcggg gagctctggg 1650
 Gagcagcttg tgtagacaag cgcgtgctcg ctgagccctg caaggcagaa 1700
 Atgacagtgc aaggaggaaa tgcaggaaa ctcccaggt ccagagcccc 1750
 Acctcctaac accatggatt caaagtgtc aggaatttg cctctccttg 1800
 Cccattcct ggccagttc acaatctagc tcgacagagc atgaggcccc 1850

tgcctcttct gtcattgttc aaagggtggga agagagcctg gaaaagaacc 1900
 aggcctggaa aagaaccaga aggaggctgg gcagaaccag aacaacctgc 1950
 acttctgcc aaggccagggc cagcaggacg gcaggactct agggaggggt 2000
 gtggcctgca gctcattccc agccagggca actgcctgac gttgcacgat 2050
 ttcagcttca ttcctctgat agaacaaagc gaaatgcagg tccaccaggg 2100
 agggagacac acaagccttt tctgcaggca ggagtttcag accctatcct 2150
 gagaatgggg tttgaaagga aggtgagggc tgtggcccct ggacgggtac 2200
 aataacacac tgtactgatg tcacaacttt gcaagctctg ccttgggttc 2250
 agcccatctg ggctcaaatt ccagcctcac cactcacaag ctgtgtgact 2300
 tcaaacaat gaaatcagt cccagaacct cggtttcctc atctgtaatg 2350
 tggggatcat aacacctacc tcatggagtt gtggtgaaga tgaaatgaag 2400
 tcatgtcttt aaagtgccta atagtgcctg gtacatgggc agtgcccaat 2450
 aaacggtagc tatttaaaaa aaaaaaaaa 2478

<210> 164
 <211> 574
 <212> PRT
 <213> Homo Sapien

<400> 164
 Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala
 1 5 10 15
 His Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe
 20 25 30
 Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro
 35 40 45
 Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr
 50 55 60
 Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr
 65 70 75
 Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu
 80 85 90
 Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser
 95 100 105
 Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr
 110 115 120
 Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile

	125		130		135
Gln Met Ile Val	His Pro Thr Pro Thr	Pro Ile Arg Ala Gly Asp			
	140		145		150
Gly His Arg Leu	Thr Leu Glu Asp Ile	Phe His Asp Leu Phe Tyr			
	155		160		165
His Leu Glu Leu	Gln Val Asn Arg Thr	Tyr Gln Met His Leu Gly			
	170		175		180
Gly Lys Gln Arg	Glu Tyr Glu Phe Phe	Gly Leu Thr Pro Asp Thr			
	185		190		195
Glu Phe Leu Gly	Thr Ile Met Ile Cys	Val Pro Thr Trp Ala Lys			
	200		205		210
Glu Ser Ala Pro	Tyr Met Cys Arg Val	Lys Thr Leu Pro Asp Arg			
	215		220		225
Thr Trp Thr Tyr	Ser Phe Ser Gly Ala	Phe Leu Phe Ser Met Gly			
	230		235		240
Phe Leu Val Ala	Val Leu Cys Tyr Leu	Ser Tyr Arg Tyr Val Thr			
	245		250		255
Lys Pro Pro Ala	Pro Pro Asn Ser Leu	Asn Val Gln Arg Val Leu			
	260		265		270
Thr Phe Gln Pro	Leu Arg Phe Ile Gln	Glu His Val Leu Ile Pro			
	275		280		285
Val Phe Asp Leu	Ser Gly Pro Ser Ser	Leu Ala Gln Pro Val Gln			
	290		295		300
Tyr Ser Gln Ile	Arg Val Ser Gly Pro	Arg Glu Pro Ala Gly Ala			
	305		310		315
Pro Gln Arg His	Ser Leu Ser Glu Ile	Thr Tyr Leu Gly Gln Pro			
	320		325		330
Asp Ile Ser Ile	Leu Gln Pro Ser Asn	Val Pro Pro Pro Gln Ile			
	335		340		345
Leu Ser Pro Leu	Ser Tyr Ala Pro Asn	Ala Ala Pro Glu Val Gly			
	350		355		360
Pro Pro Ser Tyr	Ala Pro Gln Val Thr	Pro Glu Ala Gln Phe Pro			
	365		370		375
Phe Tyr Ala Pro	Gln Ala Ile Ser Lys	Val Gln Pro Ser Ser Tyr			
	380		385		390
Ala Pro Gln Ala	Thr Pro Asp Ser Trp	Pro Pro Ser Tyr Gly Val			
	395		400		405
Cys Met Glu Gly	Ser Gly Lys Asp Ser	Pro Thr Gly Thr Leu Ser			

410	415	420
Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro		
425	430	435
Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val		
440	445	450
Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His		
455	460	465
Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val		
470	475	480
Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln		
485	490	495
Leu Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser		
500	505	510
Leu Pro Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln		
515	520	525
Gly Pro Ser Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys		
530	535	540
Asp Glu Ala Lys Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln		
545	550	555
Pro Thr Glu Leu Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val		
560	565	570
Gln Trp Glu Ser		

<210> 165
 <211> 1060
 <212> DNA
 <213> Homo Sapien

<400> 165
 tggcctactg gaaaaaaaaa aaaaaaaaaa aaaagtcacc cgggcccgcg 50
 gtggccacaa catggctgcg gcgccggggc tgctcttctg gctgttcgtg 100
 ctggggggcgc tctggtgggt cccggggccag tcggatctca gccacggacg 150
 gcgtttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
 tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
 gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
 gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
 ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400

catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct tttaggatct ttggaactgg 500
aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
agagagaaat ctcttgagga gtctcggggg cgtgaacttg accctgtgcc 600
tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
cctcacacca gcggtcctgc ggctaacgct cagggagtgc agtcttcggt 750
ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800
aaagcagaac tggcaatagt tctcctgcct cgggtggagcg ggagaagaca 850
gatgcttaca aagtcttgaa aacagaaatg agtcagagag gaagtggaca 900
gtgctgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000
tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050
aaaaaaaaaa 1060

<210> 166
<211> 303
<212> PRT
<213> Homo Sapien

<400> 166
Met Ala Ala Ala Pro Gly Leu Leu Phe Trp Leu Phe Val Leu Gly
1 5 10 15
Ala Leu Trp Trp Val Pro Gly Gln Ser Asp Leu Ser His Gly Arg
20 25 30
Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met
35 40 45
Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp
50 55 60
Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Asp Val Tyr Val Tyr
65 70 75
Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val
80 85 90
Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu
95 100 105
His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr
110 115 120

Asp	Phe	Val	Cys	Phe	Glu	Gly	Gly	Arg	Asp	Asp	Phe	Asn	Ser	Tyr
				125					130					135
Asn	Val	Glu	Glu	Leu	Leu	Gly	Ser	Leu	Glu	Leu	Glu	Asp	Ser	Val
				140					145					150
Pro	Glu	Glu	Ser	Lys	Lys	Ala	Glu	Glu	Val	Ser	Gln	His	Arg	Glu
				155					160					165
Lys	Ser	Pro	Glu	Glu	Ser	Arg	Gly	Arg	Glu	Leu	Asp	Pro	Val	Pro
				170					175					180
Glu	Pro	Glu	Ala	Phe	Arg	Ala	Asp	Ser	Glu	Asp	Gly	Glu	Gly	Ala
				185					190					195
Phe	Ser	Glu	Ser	Thr	Glu	Gly	Leu	Gln	Gly	Gln	Pro	Ser	Ala	Gln
				200					205					210
Glu	Ser	His	Pro	His	Thr	Ser	Gly	Pro	Ala	Ala	Asn	Ala	Gln	Gly
				215					220					225
Val	Gln	Ser	Ser	Leu	Asp	Thr	Phe	Glu	Glu	Ile	Leu	His	Asp	Lys
				230					235					240
Leu	Lys	Val	Pro	Gly	Ser	Glu	Ser	Arg	Thr	Gly	Asn	Ser	Ser	Pro
				245					250					255
Ala	Ser	Val	Glu	Arg	Glu	Lys	Thr	Asp	Ala	Tyr	Lys	Val	Leu	Lys
				260					265					270
Thr	Glu	Met	Ser	Gln	Arg	Gly	Ser	Gly	Gln	Cys	Val	Ile	His	Tyr
				275					280					285
Ser	Lys	Gly	Phe	Arg	Trp	His	Gln	Asn	Leu	Ser	Leu	Phe	Tyr	Lys
				290					295					300

Asp Cys Phe

<210> 167
 <211> 2570
 <212> DNA
 <213> Homo Sapien

<400> 167
 ccaggaccag ggcgcaccgg ctgagcctct cacttgctcag aggccgggga 50
 agagaagcaa agcgcaacgg tgtggtccaa gccggggcctt ctgcttcgcc 100
 tctaggacat acacgggacc ccctaacttc agtcccccaa acgcgcaccc 150
 tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcgg 200
 caggcggcag gtcccggccg aaggcgatgc gcgcaggggg tcgggcagct 250
 gggctcgggc ggcgggagta gggcccggca gggaggcagg gaggctgcat 300

attcagagtc gcgggctgcg ccctgggcag aggccgccct cgctccacgc 350
 aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgctgct 400
 gctggggcgcc gcgctgctct gcggccacgg agccttctgc cgccgcgtgg 450
 tcagcggcca aaaggtgtgt tttgctgact tcaagcatcc ctgctacaaa 500
 atggcctact tccatgaact gtccagccga gtgagctttc aggaggcacg 550
 cctggcttgt gagagtgagg gaggagtcct cctcagcctt gagaatgaag 600
 cagaacagaa gttaatagag agcatgttgc aaaacctgac aaaacccggg 650
 acagggattt ctgatggtga tttctggata gggctttgga ggaatggaga 700
 tgggcaaaca tctggtgcct gccagatct ctaccagtgg tctgatggaa 750
 gcaattccca gtaccgaaac tggtagacag atgaaccttc ctgcggaagt 800
 gaaaagtgtg ttgtgatgta tcaccaacca actgccaatc ctggccttgg 850
 ggtccctac ctttaccagt ggaatgatga caggtgtaac atgaagcaca 900
 attatatttg caagtatgaa ccagagatta atccaacagc ccctgtagaa 950
 aagccttate ttacaaatca accaggagac acccatcaga atgtggttgt 1000
 tactgaagca ggtataattc ccaatctaatt ttatgttgtt ataccaacaa 1050
 taccctgct cttactgata ctggttgcct ttggaacctg ttgtttccag 1100
 atgtgcata aaagtaaagg aagaacaaaa actagtccaa accagtctac 1150
 actgtggatt tcaaagagta ccagaaaaga aagtggcatg gaagtataat 1200
 aactcattga cttggttcca gaattttgta attctggatc tgtataagga 1250
 atggcatcag aacaatagct tggaatggct tgaaatcaca aaggatctgc 1300
 aagatgaact gtaagctccc ccttgaggca aatattaaag taatttttat 1350
 atgtctatta tttcatthaa agaatatgct gtgctaataa tggagtgaga 1400
 catgcttatt ttgctaaagg atgcacccaa acttcaaact tcaagcaaat 1450
 gaaatggaca atgcagataa agttgttate aacacgtcgg gagtatgtgt 1500
 gttagaagca attcctttta tttctttcac ctttcataag ttgttatcta 1550
 gtcaatgtaa tgtatattgt attgaaattt acagtgtgca aaagtatttt 1600
 acctttgcat aagtgtttga taaaaatgaa ctgttctaatt atttattttt 1650
 atggcatctc atttttcaat acatgctctt ttgattaaag aaacttatta 1700
 ctgttgtaaa ctgaattcac acacacacaa atatagtacc atagaaaaag 1750

ttgttttct cgaaataatt catctttcag cttctctgct ttgggtcaat 1800
 gtctaggaaa tctcttcaga aataagaagc tatttcatta agtgtgatat 1850
 aaacctcctc aaacatttta cttagaggca aggattgtct aatttcaatt 1900
 gtgcaagaca tgtgccttat aattatTTTT agcttaaaat taaacagatt 1950
 ttgtaataat gtaactttgt taataggtgc ataaacacta atgcagtcaa 2000
 ttggaacaaa agaagtgaac tacacaatat aaatcatatg tcttcacacg 2050
 ttgcctatat aatgagaagc agctctctga gggttctgaa atcaatgtgg 2100
 tccctctctt gccactaaa caaagatggg ttgtcggggg ttgggattga 2150
 cactggaggc agatagttgc aaagttagtc taaggtttcc ctagctgtat 2200
 ttgacctctg actatattag tatacaaaga ggcatgtgg ttgagaccag 2250
 gtgaatagtc actatcagtg tggagacaag cacagcacac agacatttta 2300
 ggaaggaaaag gaactacgaa atcgtgtgaa aatgggttgg aaccatcag 2350
 tgatcgcata ttcatgtatg agggtttgct tgagatagaa aatgggtggc 2400
 ctttctctgc ttatctccta gtttcttcaa tgcttacgcc ttgttcttct 2450
 caagagaaaag ttgtaactct ctggtcttca tatgtccctg tgctcctttt 2500
 aaccaaataa agagttcttg tttctggggg aaaaaaaaaa aaaaaaaaaa 2550
 aaaaaaaaaa aaaaaaaaaa 2570

<210> 168
 <211> 273
 <212> PRT
 <213> Homo Sapien

<400> 168
 Met Ser Arg Val Val Ser Leu Leu Leu Gly Ala Ala Leu Leu Cys
 1 5 10 15
 Gly His Gly Ala Phe Cys Arg Arg Val Val Ser Gly Gln Lys Val
 20 25 30
 Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe
 35 40 45
 His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala
 50 55 60
 Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala
 65 70 75
 Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro
 80 85 90

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg		
	95	100 105
Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln		
	110	115 120
Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp		
	125	130 135
Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln		
	140	145 150
Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp		
	155	160 165
Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr		
	170	175 180
Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu		
	185	190 195
Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu		
	200	205 210
Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile		
	215	220 225
Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe		
	230	235 240
Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn		
	245	250 255
Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly		
	260	265 270

Met Glu Val

<210> 169

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 169

tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 170

caggaaacag ctatgaccac ctgcacacct gcaaattccat t 41